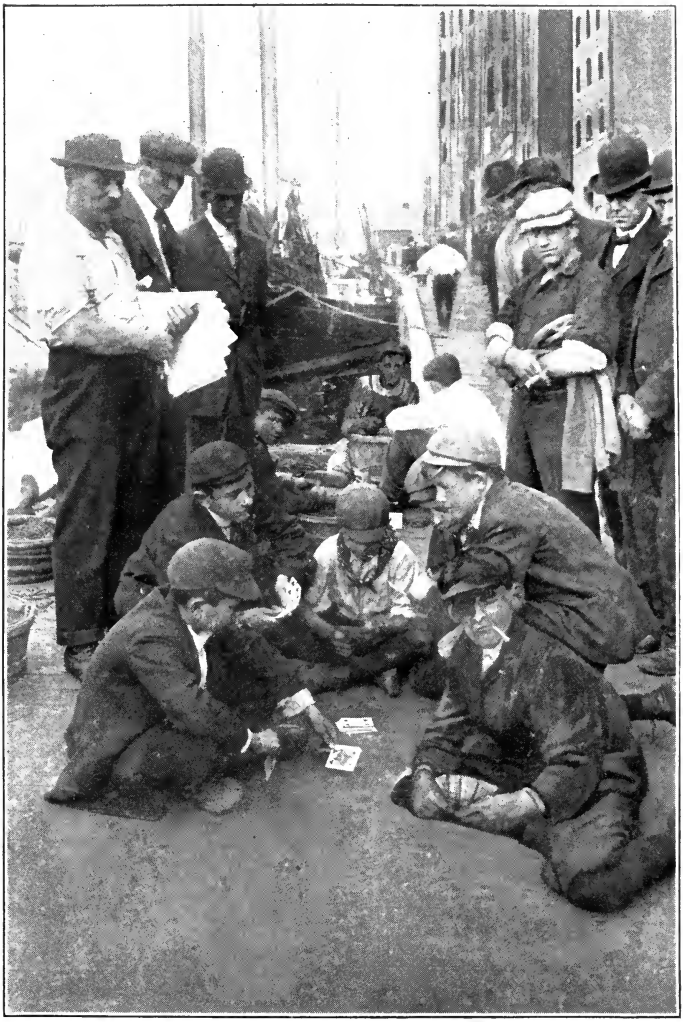
VOCATIONAL GUIDANCE

J. ADAMS PUFFER

B. L. Edwards



On T Wharf, Boston

VOCATIONAL GUIDANCE

THE TEACHER AS A COUNSELOR

By

J. ADAMS PUFFER

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RAND McNALLY & COMPANY

Chicago *New York* *London*

Edition of 1914

The Rand-McNally Press
Chicago

THE PREFACE

This book, like *The Boy and His Gang*, springs directly from personal experiences in the Lyman School for Boys, the Industrial School of Massachusetts for delinquent boys. Under the efficient leadership of Superintendent T. F. Chapin, this school has been made over from one of the old military type to a free school where boys, through learning to do by doing, are given a chance to obtain a practical common-sense education.

The school is an industrial school in fact as well as in name. It could justly be called a vocational school, for many of the boys obtain here the guidance and training for their life work. The great majority of the four hundred boys are from twelve to sixteen years of age, the right age for guidance. One half of their day is spent in the schoolroom and one half in manual training in the shops or in outdoor work. A short daily period and Saturday afternoon are given to play. In the free life of the school the new boys soon learn by conversation with their older and more experienced cottage mates, or with their masters or teachers, and by personal observation in the various shops, the kind of work which they would like to do.

Instruction in agriculture was given once a week in all the schoolrooms. A school garden plot was planted and cared for by each boy in school hours. Two cottages also had garden plots for the boys. Instruction in dairying was given to about twenty-five boys in connection with the practical work of caring for the herd of sixty milch cows. Opportunities for driving the school teams were open to four or five boys.

For five months all the boys were given a half day's work each day in manual training. Then forty boys showing good mechanical ability were advanced to five months' work in wood turning and in forge work. A few of these were advanced to machine work. Twenty other boys showing good mechanical skill in the sloyd classes were advanced directly into the carpenter shop to learn the trade.

Fifteen boys were at work in the shoe shop, repairing and making shoes. Thirty boys mended and made the shirts, overalls, and suits worn by the pupils. Ten boys worked in the bakery and twenty in the laundry.

One of the best vocational departments, the printing shop, was directly connected with the grade schools. Here forty boys received excellent training for one of the best of the high-skilled occupations. A school paper was published once a week, and in it were printed the best articles and essays written by the boys in school. Superintendent Chapin had some very definite ideas on education. He allowed no formal grammar to be taught in the school, but debates, letter writing, reports of sermons and addresses, stories of excursions and all other experiences interesting to boys were made the basis of literary work. The printing department proved of invaluable service in all the school work.

I should not forget our band of twenty-five boys. In this band the boys received such thorough training in music that several of them went directly from the school to good paying positions.

It is evident without discussion that such an industrial school offers an almost ideal field for vocational training and guidance, and the spirit of nearly all the masters, matrons, and teachers was to get the right kind of boy into the right place. As principal of the school, the

responsibility for the discipline of the boys fell upon my shoulders. In the first six months of experience I discovered that the easiest and best way to discipline a boy was to get him into the work he liked. I therefore made a careful study of the family history, the talents, experience, and ambition of each boy, with the idea of right guidance. After three years' work in the Lyman School and three years' study in Clark University, I acted for three summers as a substitute probation officer of the Boston Juvenile Court. Here again was reënforced the fact that success in handling a difficult boy depends largely upon getting him into the work he likes.

These experiences gave me a large and interesting acquaintance with unfortunate boys, many of whom when in trouble — and not infrequently a perplexed parent — came to my home in Needham, twelve miles out of Boston, to find out what to do. As the direct result of these visits the office for vocational guidance was opened in Boston.

In the last eight years lecture work has taken me into every section of this country, and I have purposely so planned my trips as to spend practically one half the time in consultation with experts and in the investigation of industrial and occupational conditions in cities and in the country. This book is the outgrowth of all these experiences.

I am therefore indebted to many persons in the South, East, and West for invaluable contributions. I wish to acknowledge especially my obligation to all my fellow teachers and officers in the Lyman School, particularly Mrs. Emily L. Warner, teacher of the Berlin Cottage, for her inspiration in the work for delinquent boys and for her shrewd analysis of boy character. I owe most, of course, to my own father and mother, both of whom

were teachers and good counselors. I am much indebted to Mr. E. T. Brewster for assistance and criticism, and to Mr. Park Pressey for many of the excellent photographs used in illustrating the book.

November, 1913. J. ADAMS PUFFER.

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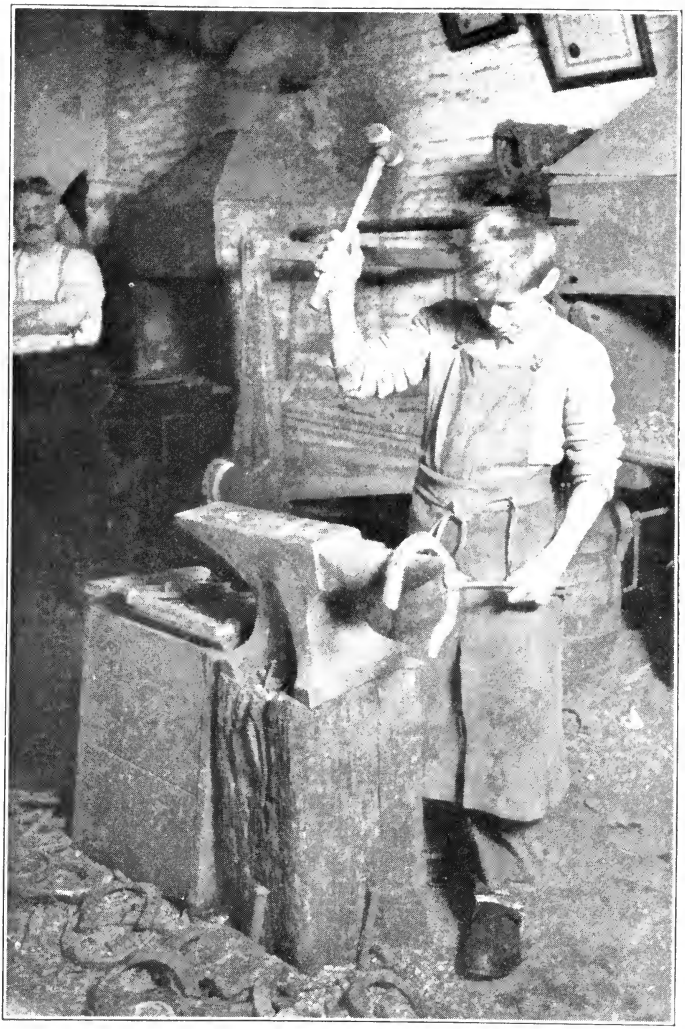


The young blacksmith

VOCATIONAL GUIDANCE

CHAPTER I

Vocational Efficiency the Basis of All Education

ALL training is originally vocational. In a primitive society, such as appears, for example, in Longfellow's *Hiawatha*, each community is almost completely self-supporting, and each man and woman does very nearly the same work in it as any other. Whenever the family needs an outfit of new clothes the man goes out and kills a deer, his wife dresses the skin, sews it with dried sinews with a bone needle, and trims it, it may be, with a string of teeth. They two, between them, do all the work. To them alone belongs the entire product.

The food of the household has fallen before the husband's bow or grown under the wife's tillage. Each makes his own tools and weapons; together or separately they build their dwelling, guard their property, bury their dead. There is neither division of labor nor social class. Whatever in the community life virtually all adult men or women are not capable of doing, simply goes undone.

Commonly, to be sure, even in the simplest societies, there is some ordering of duties on the basis of age. Certain activities fall to young people; in later life they take on others. It is "Old men for counsel; young men for war." The chief, the medicine man, the wise woman, have their special functions. But these are, for the most part, rather added on to the general duties than allowed to take the place of them. The special status is apt to come by mere lapse of time.

The only well-marked difference of occupation is on the basis of sex. From the earliest beginnings of human society, men have had certain tasks and women certain others. Rigid custom almost invariably separates the two in such wise as to assign to the one protracted tasks done at slow speed and to the other those which call for violent bursts of activity.

> "Man works from rise to set of sun;
> Woman's work is never done,"

reflects the earliest of all attempts to adjust the task to the worker. With this separation comes the first vocational control.

Every boy, therefore, under primitive human conditions, is born to a certain inevitable course of life; every girl to a different but equally inevitable course. There is no choice of vocation, for all men do the same things, and all women. Vocational guidance there is none; for there are only two vocations, and each child is born into one or other. Natural capacity, experience, mere length of days, may carry one individual a little farther than the rest along the same road; but the life as a whole is predetermined.

Education, under these circumstances, consists in practicing the inevitable duties. From before the beginnings of history, boys have followed their fathers to fishing stream and hunting ground, and learned to do by doing and by seeing done. Girls, meanwhile, have stayed at home, watching and helping their mothers while they prepared food, made baskets or cloth, and cared for the little brothers and sisters. Much also of a child's training was by spontaneous play. A few initiation ceremonies at puberty have comprised the entire formal schooling of the vast majority of mankind.

The beginning of an education. Acquiring first-hand information

Such an education had for its outcome muscular habits, trained senses, and first-hand information. Primitive as it was, it was everywhere vivified by its contact with reality. What the pupil mastered meant food, shelter, comfort, safety; and so thoroughly was the lesson learned that the little girl of to-day still tends her dolls, and the little boy wants to "play Indian" in the woods. This

was the first pedagogical method, the method of Nature. No system of education can be sound that altogether departs from it.

Nor is the case essentially different when, from a primitive Hiawatha, we pass to so highly civilized beings as our own colonial forbears, whether in the days of Priscilla and John Alden or of Washington and Betsey Ross. Progress has indeed gone far, and the structure of society has become complex. There are social classes—nobles, gentry, yeomen, slaves; there are soldiers, artisans, merchants, scholars. Every man has his special label—hosier, spinner, draper, locksmith, armorer, printer—and every boy, at least, must decide which of a hundred different careers he is to essay.

Education, nevertheless, continues to be largely vocational. All women do nearly the same work, so that a girl is born to her trade almost as inevitably as in the savage state. Whatever she may learn from books (there were learned women all through the Middle Ages) and whatever accomplishments she may acquire, her real training will come by way of her home duties. The little girl will work samplers, the young woman will spin the flax that is to make her tablecloths, the old wife will knit stockings in the chimney corner. For each girl there will be a lifelong training, whose backbone will be useful work.

Nor is the situation of the boy appreciably different. He will perhaps get more schooling, and have a somewhat wider range of choice for his life work. But his real training, the drill that makes a man of him, will come by bread-and-butter occupations. Whatever trade he selects, it means early apprenticeship, with mastery from the bottom up. Even if he adopts one of the learned professions, his Latin and Greek are still the tools of his

trade. Every conjugation and every rule stand related to his future success.

Many persons now living can recall the last stages of an economic situation that was on the whole nearer to the primitive state than to conditions which have obtained since the so-called "industrial revolution." Men and women still "did their own work." The clothes on any citizen's back might have been made by his own wife, woven on a loom, spun on a wheel of his own construction from wool that he had himself clipped from his own sheep. Such portions of the process as did not chance to take place under his own roof were still performed in his own neighborhood. He himself knew every detail from his youth up. Men and women alike got their education by doing and by seeing done.

Spinning was formerly a part of a woman's education

The problem of vocational guidance still remained simple. Every girl, as a matter of course, mastered the entire lore of womankind before she turned to her needle for a living, taught, or became noted for her care of the sick. Whatever peculiar gifts she might have, she practiced all the general duties of a woman before she began any special work.

Every boy, as he grew up, had virtually the whole of the world's work under his eye. Instead of vast factories,

with "No Admittance" on every door, where he might not see even his own father earn his bread, each lad had free run of a score of little shops, where every process lay open to his curious eyes. He knew masters and journeymen, he asked questions, and he learned. When it was time to select his own occupation he already knew a good deal about them all. If he did not come up in his father's trade, he might be apprenticed to his father's friend. At any rate, his elders probably knew the whole industrial field. They knew also their boy, who in a very real sense had already "seen life"—the real working life of grown men—far more completely than does the most precocious of modern city youths, and had responded by some show of interest or fitness. In those simpler times, the chance was small that a square peg would try to fit a round hole.

There was, moreover, vastly more education to be had from the general community life than now. There were no paid fire departments; but every good citizen, when the blaze started, first yelled "Fire!" and then joined the line to pass buckets. When a house was building, the neighbors took a hand at "raising" it. They husked one another's corn, "sat up" with each other in sickness, did a whole town's errands on the rare occasions when they visited the city. In a thousand different, incidental ways each boy or girl had actually had a greater number of educative experiences than even the most favored of modern youth.

We are too apt to forget, in these days of fetish worship of books, how effective was this ancient bookless, vocational training. "The daily doing of useful things" is in itself highly educative. One cannot read, for example, the "broadsides" which our own pre-Revolutionary Whigs and Tories leveled at one another, and note the high general intelligence which they assume in the public

to which they were addressed, without a new insight into the truth of Pestalozzi's words: "It has become indisputably clear to me how much more truly a person is moulded through that which he does than through that which he hears. . . . In the education of people serious and severe training for a life work must necessarily precede all word instruction." Unorganized and incidental as this old education was, it has been amply justified by its fruits.

Its saving grace was always, of course, its contact with practical life. The child could always feel that he was doing the same work as the grown-up people around him, and preparing himself, in due time, to take his place among them. This is the most powerful incentive to diligence yet discovered, the most efficient educational motive there is.

More of the ancient driving force is still the pressing need of our modern educational systems. "It is high time," says President Eliot, "that our teachers and leaders of the people understood that every civilized human being gets the larger part of his life training in the occupation through which he earns his livelihood, and that his schooling in youth should invariably be directed to prepare him in the best way for the best permanent occupation for which he is capable. In other words, the motive of the life-career should be brought into play as early and fully as possible."

This life-career motive now works powerfully in all professional schools, in various training and normal institutions, throughout the ordinary high school or college for those who purpose to teach, and in many manual and practical courses everywhere. But its operation ought to be greatly extended. The lower grades also should profit by it, so that every child, from

Courtesy of Superintendent of Schools, Boston

In many schools instruction in cooking relates a girl's school work with her home life

the very beginning of his school work, should always feel his other incentives reënforced by this bread-and-butter push.

This, to a most encouraging degree, the American educational system is already beginning to do. There was a time, not so many years ago, when it seemed as if modern young people were to be quite deprived of the ancient incentive to good work. The "little Latin and less Greek" which once merely rounded out an education gained by contact with men and things, came to be the synonym for education itself. The apprentice system went out. The old strenuous, educative life of home and farm yielded to the changed conditions of industry. The incidental district schooling, when work was slack, expanded till it absorbed the child's entire effort. The star pupil who could recite by the page the river drainage system of Cochin China knew only vaguely that somebody bought his shoes at the store. Truly, the schools

had traveled far from the times when arithmetic was taught only in the universities.

To-day, one need not point out, saner counsel prevails. Drawing and music came in first; then gymnastics, sewing, cooking, shop work, typewriting, school gardens, folk dancing. The story is still too recent to need retelling here. Once more the growing child sees some connection between his school work, his present happiness, and his future success.

Our progress, nevertheless, gratifying as it is, still falls far short of the ideal. We have admirable trade schools and practical courses, but their number is not yet the tenth part of what it should be. Actually, in certain ways, a negro boy or girl in the South, who enters an

Physical culture in the form of folk dances and gymnastics is now being recognized as a necessary part of a well-rounded school course

Carpentry in the John Worthy School, Chicago, makes it possible for delinquents to become useful members of the community

industrial school, or a delinquent youth sentenced to a reform school in the North, has a better opportunity for a sound, practical education that shall help him to earn his bread and butter and to become a useful member of his community than has the child who comes up through our public schools.

The late Professor Dolbear of Tufts College thus satirized a condition of affairs which, in spite of manifest improvement in favored communities, is still the prevailing type of common-school education:

"In antediluvian times, while the animal kingdom was being differentiated into swimmers, climbers, runners, and fliers, there was a school started for their development. Its theory was that the best animals should be able to do one thing as well as another. If an animal had short legs and good wings, attention should be devoted to running, so as to even up the qualities as far as possible. So the duck was kept waddling instead of swimming, and the pelican was

kept wagging his short wings in the attempt to fly. The eagle was made to run and allowed to fly only for recreation, while maturing tadpoles were unmercifully guyed for being neither one thing nor another.

"The animals that would not submit to such training, but persisted in developing the best gifts they had, were dishonored and humiliated in many ways. They were stigmatized as being narrow-minded and specialists. No one was allowed to graduate from the school unless he could climb, swim, run, and fly at certain prescribed rates; so it happened that the time wasted by the duck in the attempt to run had so hindered him from swimming, that his swimming muscles had atrophied and he was hardly able to swim at all, and in addition, he had been scolded, punished, and ill-treated in many ways so as to make his life a burden. In fact, he left school humiliated. The eagle could make no headway in climbing to the top of a tree, and although he showed he could get there just the same, the performance was counted a demerit since it had not been done according to the prescribed course of study.

"An abnormal eel with large pectoral fins proved that he could run, swim, climb trees, and fly a little. He attained an average of sixty per cent in all his studies. He was made valedictorian of the class."[1]

With all our improvements, we yet fail in large measure to educate with an eye to any definite useful purpose. Not yet have we returned to the immemorial method of nature and of man — education for vocation and by it.

[1]From an article in *The World's Work* by Arthur D. Dean.

CHAPTER II

The Need of the Vocational Guide

VOCATIONAL education alone is not enough. Though we had the most perfect system imaginable for educating youth to productive work, our problem would still be but half solved. Youth must not only be trained for its life work: it must also be guided in its choice.

The necessity for vocational guidance comes primarily from the complexity of modern industry. Compare, for example, the simple process of making clothes of deerskin or homespun, with the present-day operations connected with getting a new suit on a man's back. One tailor measures him. Another cuts the cloth. Several more have a hand in sewing it. The wool itself may have come halfway across the continent, or be the mixed product of several climes. A hundred different processes went to building the freight car that carried it; a hundred different persons had a share in the rails and the roadbed over which it ran. Still a different person designed the cloth, for a second to weave on a loom owned by a third. Somebody else invented the loom; still others improved every part.

A capitalist planned the enterprise, an architect designed the mill, and his draftsmen made the working plans. Masons, carpenters, steam fitters, plumbers, painters, glaziers, laborers, built it. Miles away, somebody else dug the clay to make the bricks; a different person cut the wood to burn them. There was the machine to press the bricks into shape, the hand labor to load them on the car, and the switch tender who headed them for the

right city. Bankers handled the capital for these manifold enterprises; a vast office force kept track of the details. All these persons have to be housed and fed, cared for in sickness, amused when they are through work. The end product, the only thing that any human being really wants for his own direct use, is that one suit of clothes. Yet a thousand different persons have contributed to

The manual-training class aids the boy in finding his place in the working world

make it. Out of the price the wearer pays, a thousand different persons take their pay.

Fifty years ago one man made a pair of shoes; to-day it takes more than two hundred. Yet these two hundred individuals themselves start with the finished leather, with nails, thread, machines, and factory ready to hand. Then, too, no account is made of directors of the work, the office force of the factory, the packing and transportation, the selling agents, the complex social arrangements which handle the money charges of the business and return profits to the owners and wages to the men at the bench.

Dip wherever one will into the world of modern industry — into trade, manufacturing, even into agriculture — he finds everywhere a vast and complicated network of interrelations. Each worker is contributing some special detailed element to the final result. Each is commonly fitted by nature for his particular task; often he has been elaborately trained for it. To a surprisingly small extent can any one of the world's toilers change places with any other.

Yet if each of this multitude had not somehow found his place in the world, the work of the world would by so much have gone wrong. If each new worker, as he comes to his life task, does not take up the particular labor for which he is best fitted by nature and for which he has been best trained, then by so much is the work of society less perfectly done and by so much is the individual himself

One man doing the work now done by two hundred

robbed of some portion of his life happiness. His efficiency and his welfare depend on his finding himself, early in life, where he belongs. With each yearly addition to the complexity of our industrial structure, the chance of his doing this unguided becomes less.

One has only, therefore, to get a sharp mental picture of the actual conditions of modern industry to be convinced that vocational training alone is not enough. However much we may return to the older and sounder theory of education, however much we may multiply motor training, practical work, the schooling of senses and judgment, we shall still fall short of our full duty if we do not in addition point the child toward his final business.

Vocational training is not enough; there must be vocational guidance along with it. The grade teacher must herself be taught to detect the signs of budding talent, to awaken the child to self-knowledge concerning his own special powers, and to point the way toward the exercise of those powers for his future livelihood. The schools must not only train; they must also foster and direct. Thus only shall we restore to the classroom the energizing sense of contact with reality.

As industry has become more complex and more specialized, intelligent guidance through its mazes has by no means kept pace. As a result, we find in country almshouse and in city park and lodging house a veritable army of "worn-outs" and "misfits"; while even in store and shop, among people actually employed, the perfect adjustment of worker and work tends to become increasingly difficult. We take up the task which offers itself, though we may have been trained for something quite different or, more commonly, trained for nothing in particular.

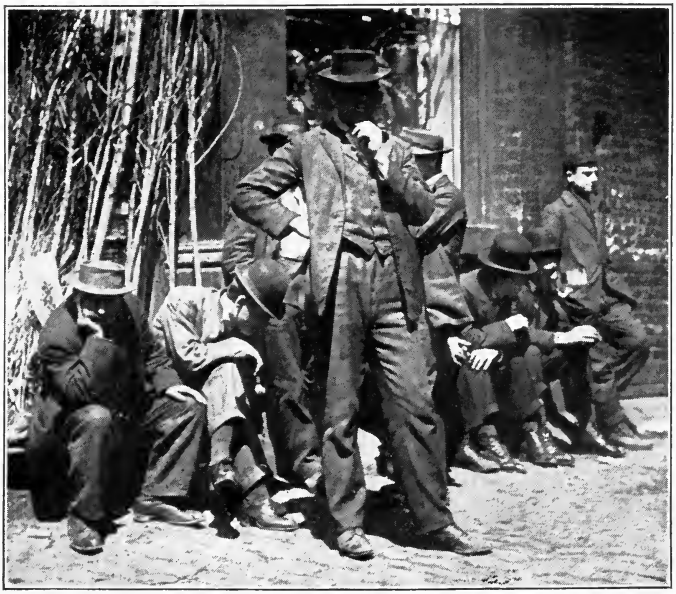
A motley crowd of "downs-and-outs" is always to be found in a basement lodging house

Few persons who have not specially looked into the matter at all realize how numerous in the present-day world are these vocational misfits. "I like farming, and here I am teaching," are the words of a professor in a normal school, who should have received by inheritance a quarter-section farm in the Middle West, "a third-rate teacher when I could have made a first-class farmer. My father was a successful farmer, and I always liked the work. But the prevailing public opinion in my home community was that success in life could only be found in the city, in business or a profession, and here I am. Now it is next to impossible to return, for I have a city family and my education and training have been in the wrong direction."

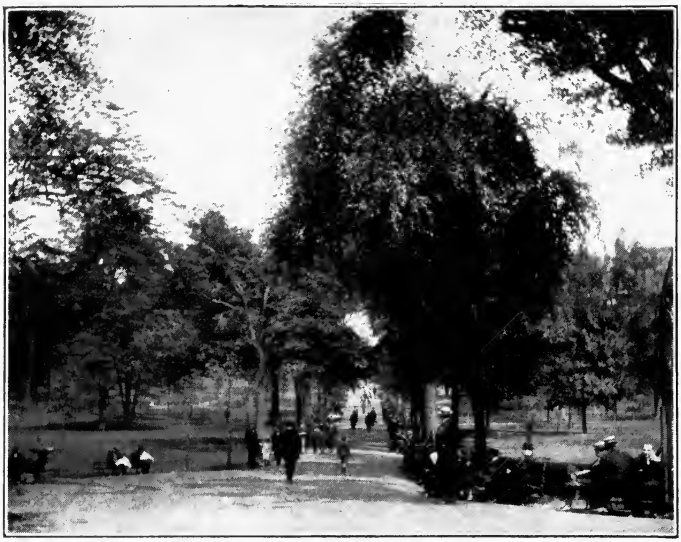
An eminent American man of science, whose name, were it to be mentioned, would be recognized in half the laboratories of Europe, at the height of his professional career used frankly to say that the regret of his life was that he had not kept on with his father's business. A successful man of affairs, trusted, rich, the originator of a new field of industrial enterprise, continues to look back with regret

to the day when he returned from the art schools of Paris. Few persons there are, of any station in life, who, even though they have themselves been fortunate in the selection of a life work, cannot point to at least one friend who would have been happier and more useful if he had listened to some other call. Who of us has not seen youths pressing into fields already overcrowded, and for which they had no special gifts, while they passed by the open gates of empty tracts?

Principal Jesse B. Davis of Grand Rapids, Michigan, has made an illuminating study of the conditions among his high-school students in relation to their future occupation. He found that of five hundred and thirty-one



Newspaper Alley, Chicago. "Vocational misfits" waiting to learn of a possible job



Many, following the paths of least resistance, drift to the city park
Two hundred "misfits" on Boston Common at 10 a. m.

boys, two hundred and ninety-one, more than half, had not decided upon a life work; and one half even of those who had decided had no practical knowledge of the vocation they intended to enter. When we further discover that of two hundred and forty boys, seventy had decided to be engineers, the need of vocational guidance is still more evident. At this rate, three or four fair-sized high schools would supply the whole state with more engineers than could possibly find employment therein. "Altogether," said Principal Davis, "the investigation gave much evidence of the need of better guidance, together with a knowledge that the pupils who have a definite aim actually do a much higher grade of work than those who are drifting along the path of least resistance."

It appears, furthermore, from this important study, that out of two hundred and forty boys in the Grand Rapids High School, only nineteen planned to enter the same trade or profession as their fathers. Every boy, one need not say, ought to follow the particular work which is most in harmony with his own talents, and to be trained in accordance with his special gifts and opportunities. But the presumption always is that the boy will, on the one hand, inherit his father's peculiar aptitudes, and on the other, enjoy peculiar opportunity for an early interest and a favorable start in his father's trade. But when, among these especially fortunate boys, fewer than eight per cent plan to follow in their fathers' path, it means that a considerable proportion of the others chose unwisely, or else their fathers did. In either case, the need of vocational guidance is evident.

Furthermore, even of the two hundred and forty boys, out of the five hundred and thirty in the Grand Rapids High School who had decided on a life work, no fewer than one hundred and twenty-three confessed frankly that they had no real information concerning the vocation to which they looked forward. Only one hundred and seventeen showed any sign of an intelligent choice; only one hundred and fifty were shaping their school work with an eye to the life work which they had selected.

But if this is the situation among business and professional men, who, though they chose somewhat unwisely, are still successful; and if among so specially favored a group as are high-school pupils only about one in five is wisely guided toward his life career, what must be the case with pupils who leave school at the end of the grammar course or earlier? A single case from real life, the name only being altered, tells a story which every probation officer in a juvenile court can duplicate many hundred

times over. Probably nine tenths of our grammar-school graduates escape a like experience rather by good fortune than by any deliberate plan.

"John Panello, aged fifteen years and five months, graduated from a public grammar school in New York. On the twentieth of February he got his working papers from the Board of Health. In school he had been fond of arithmetic, and *from childhood had wanted to become a bookkeeper*. But the classroom had become irksome to him, and his parents, financially comfortable, had just 'taken it for granted that he would go to work after graduation.' He received no answer to his first application for a job — that of office boy in a place where he hoped that he might work up to a position as bookkeeper. So during the first three weeks after leaving school he spent his mornings looking for work and his afternoons gathering bits of wood with another boy and selling them around the neighborhood for kindling.

"His efforts got him a job as errand boy for a dyeing and cleaning establishment. Five dollars a week were the wages, and tips amounted to a dollar or two extra. At the end of one week, the boy who had the job before came back and John was fired. He thought that if he could have stayed there five years, he could have 'got ahead.'

"After a day's hunt he saw a sign, 'Boy Wanted,' and was taken on by a firm manufacturing ladies' hats. Here he swept the floor, ran errands, and helped to pack. At the end of two weeks, during which he had been paid $4 a week, he left 'because a feller who had been there four years was getting only $6 a week.'

"Before leaving, he had been lucky enough to get a promise of a job with a millinery firm. At first the work consisted in going for stuff to the first floor, then he ran a crimping machine, and next was detailed to 'get the cord downstairs for the men who make rugs.' After a week and a half of this, during which his wage was $4.50, another fellow said, 'Come along and learn carpentry.' So John got a job at loading and unloading wagons for a firm that made wooden boxes. He was soon allowed to sandpaper the sides of boxes with a machine and then was put at cutting out sides of boxes with a circular saw. One afternoon he reversed the elevator suddenly and burned out the fuse, so he hurried home, afraid to meet the elevator man. When he learned next day that the boss was going to move to Staten Island, he decided to quit, though he

was getting $5 a week. He had been with the firm two weeks.

"During the next three weeks John did five different kinds of work for a manufacturer of jewelry and notions. He was making $4.50, and when a man said, 'Come along, I've got an office job for you,' he quit. The office job consisted in acting as shipping clerk, running errands, answering the telephone, and sweeping the floor for a manufacturer of artificial flowers. He is still there, getting $5 a week. He doesn't think much of the work."—*The Survey*.

The City Club of Chicago, through a sub-committee on the educational problem of the community, made a most thorough and reliable investigation of the relations between the local schools and the local industries, of the reasons why so lamentably large a proportion of the children are leaving school before completing the elementary course, and of the need for vocational education and vocational guidance.

No less than forty-three per cent of Chicago children, it transpires, never reach the eighth grade; while forty-nine per cent, virtually one half the entire school population,

Courtesy of "The Christian Science Monitor."

A class in printing. Trade training which helps to keep boys in school

Courtesy of McClure's Magazine

Very busy half the time, idle half the time, tends to moral and mental degeneration

never complete it. Those pupils who leave school between the ages of fourteen and sixteen, and nominally go to work, are, in the Committee's words, "idle half the time, and earn during those two years not more than an average of two dollars a week. . . . Their idleness," the committee continues, "during at least half the time, their frequent passing from one job to another, their lack of any responsibility, necessarily tends to moral, mental, and frequently to physical degeneration."

The Massachusetts Commission on Industrial and Technical Education found the same unfortunate conditions. In this one state twenty-five thousand children, between the ages of fourteen and sixteen, were not attending school; and of these a fourth had not finished the sixth grade, one half had not completed the seventh, and five sixths were not prepared to enter the high school. The result, in the words of the Commission, is "an unsteadiness of purpose, irresponsibility of character, and

irregularity of habit, which is the undoing of manhood and womanhood."

Both reports agree that there is little relation, or none at all, between the elementary-school work and the industrial life of the community. Occupations are recruited largely by pure chance.

It appears, moreover, in both reports, that the vast majority of the children who drop out before completing the grammar course do not do so, in any wise, from necessity. They have simply lost interest in a school life which does not seem to be leading them anywhere. In Chicago this was the testimony of more than ninety per cent; while at least three quarters affirmed that they would have continued in school if they had been getting some sort of trade training there. In Massachusetts seventy-six per cent of the families interviewed were quite able financially to give their children further industrial training; fifty-five per cent declared that they would

The home of the job-to-job man

have done so if the opportunity had been given them.

These are but instances, which might be multiplied many times, of the crying need all over the country for a school training that shall point each child toward his place in the world of affairs. Even apart from the question of industrial efficiency, what shall we say of the preparation for citizenship of a school system that allows half its personnel to fall by the wayside before it finishes even its elementary work!

But if the child, from the beginning of his formal schooling, is in any measure to be pointed in the direction of his life task, who is there half so well fitted for this vocational direction as the grade teacher?

The parents are not doing it. In most cases they cannot. Outside the somewhat narrow ranks of professional life and the more responsible business positions, a father rarely has either the knowledge of the industrial situation or the insight into character and capacity to guide his son aright. Too often he magnifies the boy's virtues while he overlooks his failings, while he is pretty certain either, on the one hand, to be content with the immediate wage return and think too little of the boy's ultimate good; or, on the other, to be over-ambitious for his offspring. The former is perhaps the commoner error; the latter often brings the greater tragedy.

Most unfortunately, also, there is a distinct tendency for fathers to influence their sons to enter almost any other calling than their own. The reason is as simple as it is ill-founded. All work has its disagreeable side. Cattle eat the clover and leave the briers in the crib, but too often man chews over only the innutritious portions of his labor. The boy sees and hears the "outs" of his father's trade and the "ins" of his distant neighbor's work—and chooses the one of which he knows the least.

Boys' "off-the-street" clubs help fill in idle time

There are lands where too many sons follow their fathers' footsteps; but our free America is not one of them.

Moreover, to place any boy or girl in the world of affairs with any reasonable accuracy demands on the part of the counselor something more than a general insight into human nature and an acquaintance with the field of industry. One must have, in addition, some intimacy with formal psychology, and must follow the methods of science rather than mere rule of thumb. Of this essential knowledge, the teaching profession, among all the larger social groups, has a virtual monopoly.

In certain ways, to be sure, the professional vocational guide has an advantage even over the teacher. He is supposed to have the better technical equipment, and he devotes himself more or less exclusively to this single

field. But such vocational counselors are, unfortunately, few; and not one parent in a thousand ever thinks of seeking their advice. Moreover, they commonly see their clients too late, after they have finished their schooling and have lost opportunities that would have been to their advantage, or have acquired habits that tend to their detriment. Even with all the elaborate and accurate modern technique for diagnosing a youth's equipment, the professional counselor is always a partial stranger, who deals with his subject under somewhat artificial conditions.

But the teacher has the child under daily observation. She sees him off his guard, at play, under varying conditions of fatigue or of health; and if herself an expert in child nature she comes to understand him more profoundly than any other human being can. She takes the pupil young, in time to correct the evil tendencies and foster the good. She is, of all persons, most likely to have the full confidence of both the child and his parents. The vocational impulse no longer comes of itself, as once it did. Neither the home nor the church is so likely as the school to develop it.

Hardly less than the child, will the school itself profit by this vocational lever. Children are keenly interested in every sort of grown-up labor. They will stop their play to watch a blacksmith shoeing a horse, a house in process of construction, a safe being hoisted into a window, a gang of laborers digging a ditch, or a solitary workman mixing mortar with a hoe. To make them feel that their daily school task is related to their future participation in some fascinating occupation of their elders is to enlist some of their most vivid experiences on the teacher's side. She who can answer the immemorial, "What is the use?" —if not always, at least often enough to make her pupil

Boys who have left their youthful pursuits to watch the construction of a building

trust where he cannot know — has made herself not only an educational but a social force, and has taken no short step toward her professional success.

The object of this book is, therefore, first of all to show the teacher, especially the teacher in the grammar grades, how she may utilize one of the great driving forces of the world in the actual daily work of her own classroom. Increased professional efficiency is one of its aims.

But the teacher can hardly infuse this driving sense of

reality into her schoolroom unless she herself is in touch with reality. She must herself know the industrial processes and needs of her community in order wisely to guide her pupil both as to his immediate interests and the choice of a life work. Not a little will be said, therefore, concerning the world of industry and the various ways by which the teacher may grow to understand it.

She cannot, however, hope to move her pupils to uncommon endeavor by any general sense of the relation of school work to future, abstract success. The child must see, in some measure, his own particular work. He must reflect on the precise use to which his growing knowledge is to be put. He may alter his destination many times; but some definite goal he must have if the thought of it is to spur him on the way. For this reason, of all these closely related matters, the problem of vocational guidance presses most strongly upon the ambitious teacher.

A system such as we are here advocating should begin early, as early as the earliest period when the child first shows the individual differences which distinguish him from his fellows and point out, however uncertainly, the direction of his future labors. It should continue throughout school life, becoming more and more precise as each child exhibits more and more his special capacities. Rarely should the process end before the age of twenty; for many of the higher callings it will need to be prolonged five, it may be even ten, years longer.

The critical period, however, will be between ten years of age and fifteen. This is the time of life when native qualities reveal themselves with peculiar distinctness and when most life-interests are born. The upper grammar grades, therefore, from the fifth to the eighth, form the place of strategic importance. It is here that we must fix our special attention.

"Moreover," as Arthur Davis Dean expresses it, "the school will furnish to the boy reliable information and competent advice as to the various occupations open to him, the conditions prevailing in each, and what the rewards of success may be. . . . It will provide for every vocation for which there is a reasonable demand,

A class in shoemaking. The school of the future will provide for every vocation for which there is a reasonable demand

and in the school the boy must remain until there is ground for believing that he has found a calling for which nature and his own effort have prepared him."

The whole matter is well summed up in the words of a report of a committee of the National Education Association:

"It is to be hoped that the constructive work and the study of industry in the elementary school will ultimately be of such a character that when the pupil reaches the age at which the activities of adult life make their appeal he will be able to make a wise choice in reference to them and be already advanced in an appreciable measure toward the goal of his special vocation."

CHAPTER III

The Effect of Vocational Control

THE most obvious results of this vocational control will naturally be industrial. The apprentice system is virtually dead. Out of four hundred establishments in Ohio, only sixty attempted to train beginners; while even of these, only three turned out really first-class mechanics. When the schools bridge over the gap which the apprentice system once filled, it will no longer be true that only one quarter of the boys who leave school before the end of the grammar course find steady and improving occupation. No longer will the other three

The semi-idleness and non-educative work of the bootblack offer much leisure for the alluring vice of street gambling

quarters be turned out to be ruined by semi-idleness or non-educative work at precisely that time of life when they are most open to life-career incentives, and most certain, in their absence, to become delinquent and degenerate. Nor will the gain, we must believe, be on the whole greater for boys than for girls.

How great the increase of industrial efficiency might become is shown most strikingly in a study, published in *St. Nicholas*, by James M. Dodge, president of the American Society of Mechanical Engineers. It appears from this that the average unskilled laborer, who has simply drifted through the lower school grades, with no particular object in view, and has gone to work at the first job which offered itself, is at twenty-two years of age earning on an average ten dollars a week; and that for the remainder of his life he does not advance beyond that wage.

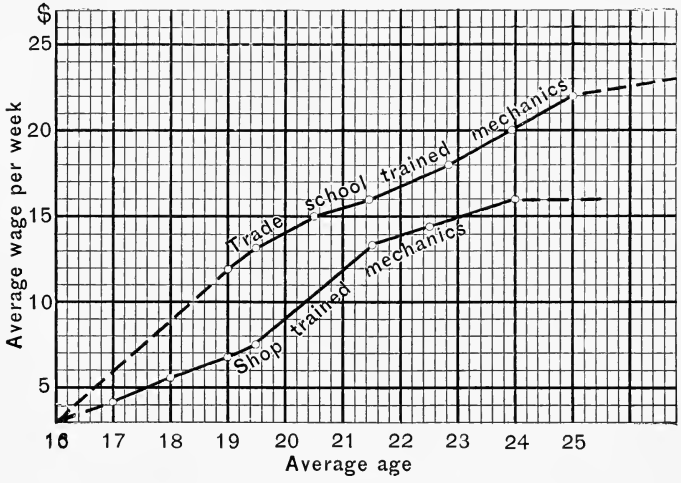
Suppose, however, the youth drifts through school, goes to work in a shop at sixteen; and then, finding himself actually doing something worth while, wakes up to his opportunities. He begins at three dollars a week. At twenty years of age he has been advanced to nine. At twenty-two he is, on the average, getting $13.22. Beyond $15.80 the typical shop-trained workman does not go. A half more of weekly wage, with the probability of decidedly more regular employment, marks the difference between the youth who finds himself after he leaves school and the one who never finds himself.

But a boy who fixes his eye on the same shop while still at school, shapes his education accordingly, enters a trade school, and remains there until he is nineteen, beginning his shop work at twelve dollars a week. At twenty-one he is paid sixteen dollars. He will, on the average, reach twenty-five dollars a week before his improvement stops. As compared with the first boy, the

vocational motive has been worth two and one-half times the weekly income for the remainder of his life.

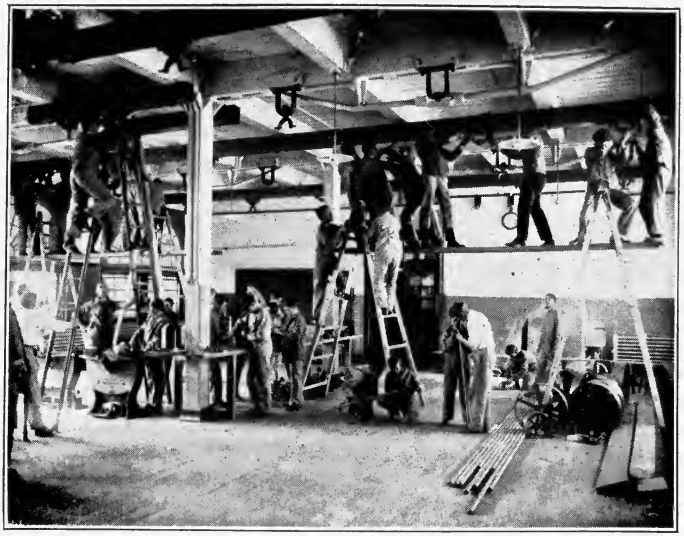
With technological training, continued to twenty-two, a youth should begin about where the untrained man leaves off, and advance to, say, forty or forty-five dollars a week, with the virtual certainty of continuous employment prolonged to a time of life considerably beyond the time when the other is worn out and retired. If in addition to his training he has the special talent to become a successful engineer, forty dollars is more likely to be his daily than his weekly wage.

The Massachusetts Industrial Committee reports virtually the same conditions. The untrained, unguided boy begins at four dollars, and goes to twelve. Four years of training, for most mechanical vocations, more than doubles the earnings during the early years. Hope of



After the diagram in Person's "Industrial Education"

Comparison of wages of mechanics having only shop training with those having trade-school training



Boys of the Mechanic Arts School, Boston, installing machinery
Here all repairs and construction work about their shop is done by the boys

advancement after twenty-five lies open to the trained man alone. Or, to quote the opinion of a particular shop:

"In one of our plants we have made it a practice for many years to secure a few of the graduates of the Williamson Training School each year. These boys are started at $12 a week, which is considerably more than they are worth, to begin with, but they demonstrate very quickly the value of their preparation, and furnish us material not only for the higher classes of machine and pattern work but also for sub-foremen and foremen."

In a sense, to be sure, these figures will have to be somewhat discounted because of the fact that the boys abler by nature are the more likely also to obtain the better training. Part of their higher pay is for the better brain structure which no school system can alter or improve. But even so, there must be, one cannot doubt, much good

mechanical ability going to waste in our bookish schools for sheer lack of direction to its proper field. Half the pupils who did drop out of the Massachusetts schools, it must not be forgotten, would have continued their

Courtesy of Girls' Trade School, Boston

Designing and making garments. Here motor-minded children have an opportunity to learn what they want to be

training a year or two longer if they could have seen any practical use in it.

One need not dwell on the advantage to the community of an improved industrial adjustment. Not only is there "plenty of room at the top"; the higher grades of labor are precisely those on which society makes its profit. With all that is being said to-day about the need of a more equal division of the good things of life, we must not forget that civilization is dependent ultimately on there being something to divide. The goods that we enjoy are all products of trained skill. There can be more and more of them for us all only as citizens as a whole are

educated for efficiency and adjusted to their proper work.

Our chief concern with vocational guidance must, however, be from the point of view of the schools themselves. As things are now, our educational system is too exclusively adapted to the "brighter," more book-minded pupils, who are preparing for office work or the professions. It is the concrete-minded, motor-minded pupils who are dropping out before the end of the eighth grade because they find themselves led nowhere that they want to go, and are being prepared for everything in general, but for nothing in particular.

Listen to the testimony of pupils who have left school to go to work in Minneapolis:

(*a*) "When I was in grade school I enjoyed it and I worked hard there; but when I got to high school there was nothing to hold me: I was not working to a purpose."

(*b*) "I did not think I could go through the University, and I do not think a fellow can get much out of high school unless he can go on. The courses are all planned for the fellows who can go on in school. I was planning to go into some sort of business; and if I had thought any of the work would help me in business, I would have stayed all right."

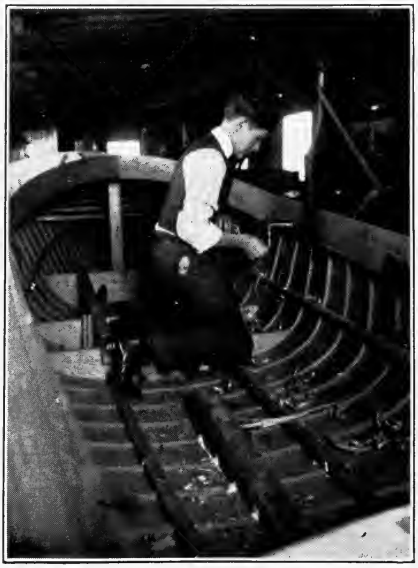
(*c*) "All of us can't be professional men, and we can't afford to be going to school just to be cultured. There is nothing practical in the high-school course, especially in the last two years. You can get all that will help you at all in business in the first two years."

(*d*) John said: "Mother, I want to be doing something that counts. That school work doesn't half satisfy me."

(*e*) Rebecca says: "The school should prepare you to enter a world of commercialism. You are measured in this world by what money you can earn, and you can't tell me that you are not. Now, no one cares how much Latin and Greek and history and all that stuff you know. They want to know if you can take care of the goods in their department or office. Now, the school has a lot of faults beside this one. Even if you know what you want, they will not let you take it and then graduate. Why, the principal had a hard-and-fast rule when I was there, and there was n't much choice as to

what you could take. How did they know what you wanted to be? Heaven and earth could n't have made them change their minds; and what's more, they knew a lot of boys and girls were leaving school because they couldn't adjust themselves. You would think if they ever found any youngster who knew what he wanted to be, they would let him do it, and help him to it."—*Vocational Survey of Minneapolis.*

Professor John Dewey has a story about a swimming pool in a certain city where youths are taught to swim by repetitious aërial drill in swimming movements, but without ever going into the water. When one boy, thus instructed, was asked what he did when at length he found himself actually immersed, he replied laconically, "Sunk."



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A natural-born artisan

The story, which happens to be true, illustrates but too truly the experience of natural-born artisans or mechanics confronted with a school training based on words alone. The schools try to help them, but in the wrong way. What wonder that they far too frequently sink below their proper level among their associates in school and of their possible efficiency in the world?

Society has already shown its vital interest in vocational education by establishing normal schools to train

A class in manual training. Pupils at the age of thirteen and fourteen being taught to think in terms of practical life

teachers, agricultural schools to train farmers, and by its liberal support of various other sorts of institution for the special training of candidates for highly skilled occupations. Already the world is coming to see the greater importance of right preparation for the ninety-and-five manual workers in society than for the five professional men alone. The movement will not stop until there is equal opportunity for all the children of all the people, until every youth is given the best equipment for the highest service. However expensive this may prove to be, it will still be the best investment the state can make.

At the age of thirteen or fourteen, youths are keenly interested in the industrial world which they must soon enter. They are beginning to think in terms of practical life and of the occupations of men and women in

the community. Boys at this period not only take the greatest interest in watching men engaged in building and mechanical trades but they also, if permitted, will spend hours at a time helping them with their work.

It is the universal testimony that wherever the teacher at this time is a shrewd vocational counselor, or where efficient industrial and practical work has been introduced into the schools, the school work can be increased to more hours a day and for more weeks in the year without injury to either pupil or teacher, that fewer pupils are tardy or absent, and that the interest in book work is markedly increased by the wise correlation between theory and practice. The pupils become more alert and ambitious as the definite life-interest takes shape in their minds and they begin to look forward toward congenial and efficient labor. The life-career motive makes school work vital.

The natural result of such vocational control is to lead a youth to an earlier decision concerning his future occupation but a later entrance upon it. On this latter point the evidence is already conclusive. The Commercial High School for boys in Boston, and the Manual Arts School for girls, to select but two instances, have more applicants than they can possibly receive, the great majority of whom, but for these or similar institutions, would already be at work. By means of the new trade schools which Commissioner Snedden is developing in Massachusetts, already above five per cent of the boys between fourteen and seventeen years of age, who had dropped out of school, have been brought back again.

The advantage of this result is two-sided. Immature and untrained boys and girls are of little use in the industrial world. Their competition lowers still further the wages of unskilled men and women, whose ranks are

Scene in the Boston High School of Commerce. The upraised hands tell which boys are doing practical work in the business world under the direction of the school

already too completely filled; and they are besides, as has lately been proved, a prolific source of industrial accidents. On the other hand, the prolonged period of tutelage keeps them under control at precisely that stage of development when they are most susceptible to the best social and industrial training. Their absence from the one sphere is hardly less desirable than their presence in the other.

To this general scheme of vocational control there are, nevertheless, one or two objections which are sometimes urged not altogether without reason. It is said, to begin with, that children in the elementary schools are much too young to be choosing a life work, that they have had no experience, either of themselves or of the world, that the most valuable talents may not appear until late in life, so that an early decision, if followed by early

Manual training in the Francis Parker School, Chicago, where individual guidance helps the child to choose and prepare for a life career

specialization, might in the end result in snutting off some boys and girls from their highest success.

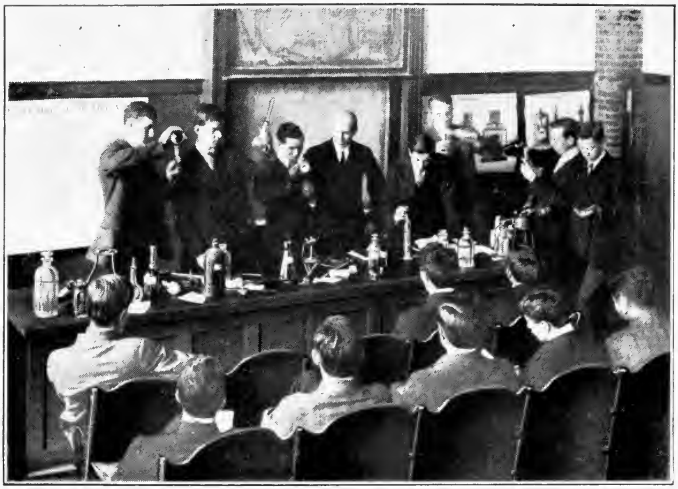
Precisely the same argument, one need not point out, was advanced against the introduction of the elective system into American colleges. The boy of twenty, it was said, is too young — and the rest! It is indeed too soon, in a grammar grade, to make an irrevocable decision concerning one's exact place in the industrial world. But the choice never is final. Good mental and manual training under the inspiration of a life-career motive, directed toward almost any trade, is better preparation for any other than is an aimless and uninterested dabbling in a general course that points nowhere. In the mobile social and industrial life of America, even an unwise early selection is not a very serious matter, and the early-choice

mistakes of the few will work less damage in the long run than the postponed-choice mistakes of the many.

Moreover, most boys and girls do exhibit the general bent of their minds early. Of the thousands of boys who have entered the trade schools of Massachusetts, only two per cent have altered their first determination, though the privilege of changing is open to them at any time. We all know that many boys and girls actually do decide early what to do in life. It should be our place to aid more of them in deciding aright.

As for the boy whose ambitions pass through a kaleidoscopic change—who wants, in turn, to become locomotive engineer, clerk in a candy store, manufacturer of automobiles, college president, and who finally goes to work at the nearest job—he is precisely the person for whom a wise vocational guide might do most. To fix his purpose on any one ambition, and to lead him by means of it to the largest aspiration he is likely to realize, is to put vigor and motive into his entire school life and save him, it may be, from the accidental occupation at the end.

In addition to this first objection to general vocational control by the schools there is a widespread prejudice all over the country against using the "bread-and-butter motive" in education. And yet any adult who will stop for a moment to use a little deliberate self-analysis will certainly find that this same despised "bread-and-butter motive" is almost the strongest force in his own life. Men do, on occasion, act on the impulse of ideals. But the force which pushes most of us through our day's work is the will to earn an honest living, to secure comfort and well-being for our families, and the decent self-respect that urges us to stand on our own feet,—not to sponge on society, but to give back more than we take.



Courtesy of "The Christian Science Monitor"

Testing oil in a high-school laboratory. Experimental work under careful guidance tends to put vigor and motive into school life

Any motive is worthy which actually does put a deeper interest into life.

The case for the "bread-and-butter" motive has probably never been better stated than by President Charles William Eliot before the National Education Association:

"All of us adults do our best work in the world under the impulsion of a life-career motive. Indeed, the hope and purpose of improving quality, or quantity, or both in our daily work, with the incidental improvement of the livelihood, form the strongest inducements we adults have for steady, productive labor, and the results of labor so motived are not necessarily mercenary, or in any way unworthy of an intelligent or humane person. There is nothing low or mean about these motives, and they lead on the people who are swayed by them to greater serviceableness and greater happiness. . . . We also need to discard forever the notion that there is something vulgar about the useful and the serviceable. After all is said to discredit the "bread-and-butter" motives, it is no moral or philosophical objection to a discovery or a field of knowledge that it

has useful applications. Even in the realms of the beautiful, fitness for some humane use enhances or contributes to beauty or is an important element in it. A ripening field of grass or of grain blowing in the summer wind is not less beautiful because it promises welcome food for man or beast. . . . Again, there is nothing inherently selfish or low minded about hard mental work done in order to improve one's chances of earning a good livelihood, whether in overalls, or apron, or in street clothes."

Nor need there, to consider a final objection, be any fear that the vocational motive in the common schools will ever lessen genuine culture in the community, either æsthetic or moral. True culture involves, on the one hand, reverence, honesty, sympathy, industry, and on the other, in Arnold's celebrated phrase, "an acquaintance with the best that has been thought and done in the world." But "the disinterested pursuit of perfection" comes by seeing and handling and doing perfect things, not by

A sewing class, Hull House, Chicago. Industrial education that looks toward the actual work of life

mere reading about them, while no small part of the world's "best" has been for practical utility. Industrial and vocational education, looking toward the actual work of life, may well prove to furnish, in and of itself, the most essential elements of true culture.

CHAPTER IV

The Equipment of a Counselor

THE vocational counselor has a large work to do: she should be prepared to do it in a large way. The world needs all sorts of work done; and it provides, luckily, all sorts of workers. But there is always the danger that the counselor or guide, in advising others, will assign too much weight to her own personal likings. Let her then, first of all, beware of pettiness, remembering always that amid the vastly complicated adjustments of modern industrial life the particular occupation which seems least attractive to her may be precisely the one in which her pupil will be most useful to the world and most happy.

Especially, moreover, should she be on her guard against despising lowly occupations. It is well for ambitious youth to aim high, to hitch his wagon to a star. But it is also better to be first in a village than second in Rome. The man who is thoroughly prepared for a task conformable to his powers, who carries his load with ease and pleasure, rises to the top of his group, is looked up to by his fellows, and is the man who has a margin of profit to his life. The powers of men are strictly limited. Worry, overwork, failure, the loss of mental poise and often of moral health, are the too frequent penalties of attempting a higher grade of work than one's natural ability warrants. The business of the counselor is to guide youth in exercising its powers, not in pressing beyond them.

A little practical insight into racial psychology is often a defense against some of the commoner errors. The

Young bookbinders. Industrial work that gives children a fine opportunity to exercise their powers

abler races of the world, such as the Scots and north-country English, the "first families" of the South, the old New England stock and its derivatives in the West, are likely to come to maturity slowly. Their children are less precocious than those of other peoples, slower in finding themselves, often less ready of wit, and sometimes less docile. They are as likely therefore to exceed their early promise as children of the less evolved races are to fall short of theirs.

On the other hand, in a community containing a mixture

of recent immigrants, the children of an oppressed people are often of a higher natural quality than the social position of their parents would lead one to suspect. In the land from which they came, mere accident of religion or of race may have kept down high native ability, which in a free country would have risen into another social group. Then, of course, there are all sorts of racial peculiarities—the remarkable gift of many Russians for language, or of the French for the nicer handicrafts. Every one recognizes that a negro will commonly have vastly greater muscular strength than a Jew, but that the Jew will be many times more resistant to disease. It is said that at Ellis Island a south Italian who answers his questions in a sober, straightforward fashion is likely to be held back by the inspector for further inquiry into his sanity; while the same fate overtakes a Russian who shows any vivacity. All such little matters the teacher will do well to keep at the back of her mind as a check on her first impressions.

Naturally, the more general psychology the counselor knows, the better. Evidently a strongly "eye-minded" boy or girl might do uncommonly well as a proofreader, and yet fail utterly in "taking" rapid telegraphy by ear. For the auditory type of intellect the situation would be exactly reversed. Then there is always with us the wordless, motor-minded boy or girl who cannot recite lessons but who, once settled in machine shop or dressmaking establishment, blossoms out most surprisingly. I well recall a case of my own, a boy who simply could not pass any sort of school test; yet he became, and that self-taught, a competent steamboat engineer. This is one of the fields where common sense needs to be helped out with science.

Most counselors also, especially in small communities where it is possible to know a great deal about a pupil's

family, will be much assisted by a general acquaintance with the new science of human heredity. Most of the qualities in which we are interested are strongly inheritable; especially is this true of high talents and peculiar gifts. A turn for music, or machinery, or teaching, a skill in the handicrafts, a fitness for a foremanship or for some one of the professions, running strongly in a family, is pretty certain to show, undiluted, in at least one child of each generation. To spot that particular child is often to solve that vocational problem offhand. If the tree is known by its fruit, so also is the fruit known, in part, by its tree.

But the great essential will always be a sympathetic insight into the individual. Most teachers think they know a great deal more about child nature than they really do. Let any beginner sit down and write out, in a hundred words, a critical analysis of a number of boys

Courtesy of Kate R. Logan

Testing corn. This special school at Marcus, Iowa, for three months in winter trains thirteen boys in accurate observation

Ability to carry responsibility shows early and is easily recognized by the vocational guide

and girls, and she will be surprised to discover of how little she is really sure. Let her, in addition, compare her descriptions with those of an associate, or with the actual performance of the pupils a year or two later, and she will probably be horrified at her mistakes. The exercise teaches caution, and it also trains one's powers of analysis and one's appreciation of human nature. Probably also the experience will inspire an ambitious teacher to more extended study and more accurate observation.

Always, as we have said, the thing that counts most is the teacher's understanding of human nature and her common-sense insight into the child's mind and character. This is especially true of what is really the most significant of qualities for the vocational guide—I mean the ability to carry responsibility. There is no scientific or educational

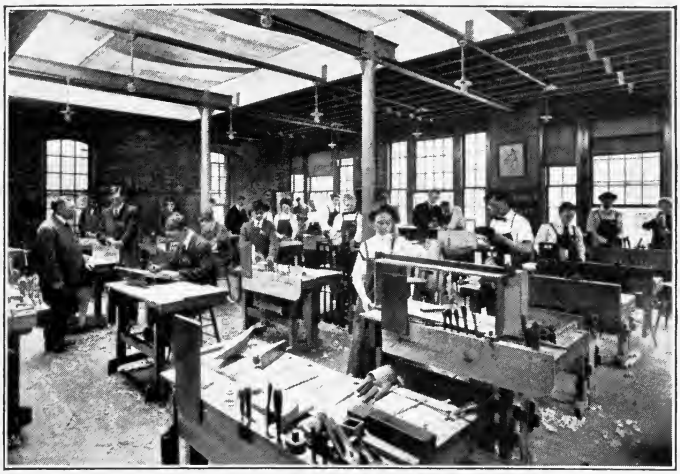
test for this. If a child has it, it shows in all sorts of little ways, and the shrewd guide recognizes it at sight. But the entire world of industry divides itself into men and women who take responsibility for their acts, and those for whom other people are responsible. As society is now constituted, the rewards of life belong to persons of the former class. To spot this group is almost the first business of the vocational guide.

All this, while essential to the successful vocational counselor, is also the equipment of the successful teacher. Each, so far as she masters it, aids not only her pupils' future welfare but her own present efficiency. There remains, however, another portion of the counselor's equipment which, outside the classroom, should make her a better citizen and lead her into a larger life.

She must know the child in the school and also in the world without. Eighty per cent of her pupils will get their living inside the limits of the state in which they were born and in which she herself is at the moment teaching them. She must, then, to advise wisely, know the industrial situation in her own community. This matter, however, we shall take up in a later chapter.

The question, therefore, is not simply, What will this boy or girl like best to do and accomplish most successfully? There is also the question, How far from home must he go to get his training, where will he get his living afterwards, and how far is he the sort of person whom life among strangers will make unhappy?

In all this it is most important that the attitude of the counselor should be one of plain business sense. What we are after is to help young people to find their right place in the world and to fill it with zeal and satisfaction; and in this commonplace task there is small room for any "hifalutin" ideas.



A teacher's class in manual training, where counselors learn how to help young people find their right place in the world

Nothing helps one to get this common-sense point of view like actually doing, for short periods, two or three different kinds of work, such as the vast majority of mankind have to do all their lives. For most women, more or less incidental sewing, dressmaking, mending, millinery, housework, and cooking will probably give sufficient insight into the handicrafts. After a forenoon at the ironing table, one can imagine what it is like to stand all day at a lathe.

Farm sense and a fellow feeling for the farmer may come by way of a small garden which one plants, hoes, and tends for one's self, and in which things actually grow.

This takes care of two of the three great types of useful toil. The other is trade. For this, one may well put in a month selling goods over the counter of a department store. The personal experience, the chance to

look behind the scenes, is better than the reading of many books.

Deeper still than industrial questions lie great social problems, and these also take on differing local aspects. Unions may be strong or weak. Women employed in housework may be looked down upon as an inferior class and virtually cut off from marrying well, or they may be,

Courtesy of William Filene's Sons Co., Boston

Personal experience in selling shoes aids the counselor to advise wisely regarding a sales position

as everywhere two generations ago, treated with especial consideration and made members of the family. There may be protection from occupational diseases, insurance against accident, limitation of hours for women and children, a minimum wage; or all these may be still to come. The same industry may be overcrowded and underpaid in one locality, and decently attractive in another.

There are also curious local problems of race. One would hardly advise an Irishman to take up truck farming where all his competitors are Italians, nor an Italian to

enter the fire department of a city where all the firemen are Irish. Greeks handle more than their share of fruit on one side of the continent, and the Japanese on the other. All such matters have to be taken into consideration. Many, unfortunately, will alter from year to year.

Does it seem a vast undertaking, this general acquaintance with the industrial geography of the entire country, and this expert knowledge of a special field? At first blush, certainly. But it does not have to be learned all at once—nor, for the most part, out of books. One picks it up here and there, a little at a time, as one goes about in the world with his eyes open. One gets it from people—all sorts of humble and otherwise quite uninteresting persons with whom one is thrown. Meanwhile one educates oneself, gets a larger interest in the world, adds a new zest to life. Many a conscientious teacher would do better, both as an instructor and as a human being, if sometimes she "cut" the educational convention and went about instead studying the great industries and talking to other women as a business man talks to other men.

CHAPTER V

The Methods of a Counselor

TWO problems confront the vocational guide. The one is to give the youth, or to obtain for him, sound advice concerning the great decision which he is soon to make. The other is to lead the youth to such self-discovery as shall make his own judgment of value in the matter.

When all is said, the youth must, in the end, decide for himself. Parents and teachers may guide and counsel and warn and instruct; they cannot rightly compel. The life of each of us is his own, to be lived well or ill on his own responsibility. To aid him to a clear understanding of himself, therefore—of his aptitudes, abilities, interests, ambitions, resources, limitations—on the part of each young person should be the primary object of every counselor.

Fortunately, however, the two problems are solved at the same time and largely by the same methods. Whatever helps the teacher to understand the pupil can with a little added effort be made to help the pupil to understand himself. Still more, as the boy or girl gains insight into his own nature he can make clear to his elders his uncertainties. The two aspects go hand in hand. A little shrewdness makes "one hand wash the other."

Self-knowledge comes easier to children than we sometimes think. A child is more frank than an adult, and often more honest with himself. Moreover, as each boy or girl approaches the age at which conversion or confirmation normally occur, his mind turns with a peculiar

A visit to a furniture factory. Seeing work actually under way helps children to discover their own aptitudes

and instinctive interest to an examination of itself. The childish unconsciousness departs, and the youth becomes keenly interested in his relations to the world.

Here, then, is the natural time for self-analysis, for the discovery of talents, for the correction of faults that will interfere with new-born ambitions, for the planning of a career, and for the development of character. The epoch is one of earnest purpose and high moral seriousness. Nature has marked it out as the special period for the work of the vocational guide.

For the multiple purpose of aiding the child to discover his own aptitudes, the teacher to understand the child, and both to realize conditions in the industrial world, few methods are more efficient than taking groups of children to see various sorts of work actually under way. This is the method which Benjamin Franklin's

father, with conspicuous success, used with him. "My father, therefore," says Franklin in one of the best autobiographies ever penned, "sometimes took me to walk with him, to see joiners, bricklayers, turners, braziers, etc., at their work, that thus he might observe my inclination and endeavor to fix it on some trade or other." This was, in fact, as we have already seen, the unconscious and inevitable method of all parents before the rise of the factory system and the railways.

Business men will usually welcome the visits of interested boys and girls, especially the proprietors of small establishments or those devoted to some distinctive or uncommon product. The publishers of the *Youth's Companion*, for example, extend a standing invitation to the public of all ages to visit and inspect their entire plant. They provide a competent guide, who expounds the entire process of illustrating, printing, folding, and mailing the periodical, together with the organization of the editorial, accounting, and general office work. The manufacturers of Shredded Wheat Biscuit at Niagara Falls do the same with their factory, and in addition provide a delicious little lunch of their products.

Many cities are making use of excursions to industrial plants. In St. Louis the Superintendent of Schools reports:

"These contacts and experiences that come to the children by the simplicity of social relations in the country must be brought about in the city by some organized plan of parents and teachers to take children into many places where men are engaged in their daily work, that the children may know how each contributes to his fellow's welfare, and that they may have some widened experience to serve them when they come to choose what they intend to do as men. Excursions of classes for this purpose are welcomed whenever they ask for admission, and there is no surer way of putting a child in sympathy with the life about him or of fitting him for intelligent participation in that life. A number of our schools have realized

during this year the opportunity given by these visits to the industries of the city for arousing the genuine interest of the pupils and of broadening their experience."

In Fairfield, Nebraska, in the midst of a prosperous farming community, the schools have developed a regular system of occupational visiting. The pupils have first a textbook lesson on some phase of agriculture,— dairying, stock raising, or the like. Then they visit some farm where that particular thing is being well done. The farmer takes them about, in company with the teacher, and talks to them of his own problems and methods. The arrangement is good for the pupils, and for the teacher, and for the farmer also.

Especially valuable is a system which is now being developed in several states, but most successfully in Iowa and Illinois. The students in the public schools are taken to visit the agricultural departments of the state universities, and under expert guidance are made acquainted

Courtesy of Amherst (Mass.) Agricultural College

Under expert guidance, public-school boys learn much from a visit to the agricultural college

with the problems of the chief local industry. University officers have proved to be most alert to coöperate with such movements, and to render all possible service. The idea is one that admits of indefinite extension in practice.

It should be possible, in addition, to plan coöperatively for an exchange of visits between schools in different localities where the types of industry are different, or where there are features of special interest. Such excursions will often be somewhat costly, so that they had better be reserved for those pupils who have shown decided interest in some particular field of work, or who deserve special encouragement. Always it is advisable to have expert guides. But even without these the pupil will learn much. Children are keen observers and stimulating questioners, so that often the most unpromising of conductors becomes interesting in their company.

Nor need the teacher hesitate, especially when away from home, to make many vocational visits unaccompanied by her class. At conventions, for example, groups of teachers may well spend half their time in studying the industries of the region and the social problems connected with them. The widened practical experience, and the atmosphere of reality which such acquaintance will give to their teaching, will be worth quite as much to their pupils and to themselves as any piece of educational theory. More than all else, just now, our common schools need to be made alive.

Closely related to visits to factory and farm are talks to the pupils in the schoolroom by successful men. Men who do this well are somewhat uncommon, so that it is worth ten failures to find the right man once. One Massachusetts high school has been able to arrange such an address regularly, each week, as part of the school program. Moreover, large numbers of business men

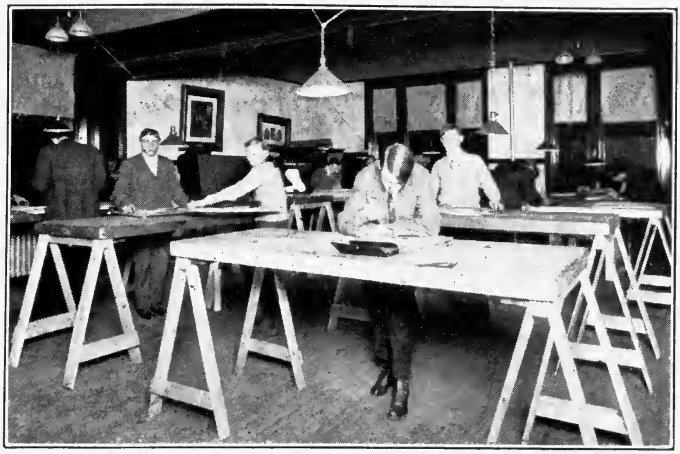
A vocational visit to a modern laundry affords an abundance of material well worthy the investigation of the conscientious teacher

who lack the time or the talent to deliver such addresses are glad to confer privately with boys or girls who need their advice. After all, there are few adults who, if approached with tact, will not put themselves out a good deal to be of service to the young.

For both general addresses and private conferences there is a veritable mine of unworked material in the traveling salesmen who constantly visit every town, and often, because of poor railway connections, have time on their hands. These men are often the cream of the business world; they know thoroughly their own work, and they pick up much information concerning that of other men. Besides this, they bring the special fascination which all travelers have for the inexperienced in the ways of the world.

Much also can be done by the teacher herself without going outside the schoolroom. It is hardly necessary to point out how easily many of the interests of the schoolroom may, with a little ingenuity, be given a vocational turn and utilized to create a vocational atmosphere. In language work, for example, there may be letters applying for positions of all sorts, or asking for information about goods, while the entire industrial world is filled with promising subjects for compositions. In arithmetic, besides the usual cost and interest problems, there may be computations and comparisons of daily, weekly, monthly, and yearly wages, of expenses and savings, and of family and business costs of various sorts that shall bring home to the pupil how wide is the range of earning power, and how enormous is the return on capital invested in education. In fact, there is hardly a school subject that is not capable of a vocational twist.

Occupational geography, always an illuminating subject, is often most useful as a vocational guide. All



In the study of architecture, drawing is given a vocational twist

normal children want to know "why," and respond at once to such suggestions as will be found in connection with the account of the geography of industry.

Highly dramatic are the biographies of successful men, —Franklin's incomparable story, Parton's *Captains of Industry*. One need not go on with the list; if there is a local hero, so much the more inspiring is the tale.

Then there is the history of industrial progress and of scientific invention, from Whitney's cotton gin and McCormick's harvester to Edison and the Wrights. All these, the things the boy or girl likes to see, the things he likes to read about, the persons who arouse his emulation, are signs of the kind of person he is. They reveal to the shrewd counselor, and through her to the boys and girls themselves, where their future calling is to lie.

Especially revelant for self-discovery is the trying-out process which accompanies every sort of practical work, together with certain types of play, either in or out of

school. There is a grammar of industrial processes through which every child ought to be put, in part at home and in part under formal instruction. He should have a chance to try his hand at drawing and painting, at wood, at metal, at clay, at caring for plants and animals, and, in the case of the girl, at sewing, cooking, and housework also. School gardens have proved not only interesting and instructive but diagnostic of the child's capacities. The ball field may suggest self-reliance or capacity for leadership which would otherwise be unsuspected. The wider and more varied the test, the better for all concerned.

All such, together with the tasks every child should perform at home and such work outside as he may occasionally do for pay, give to both youth and counselor a chance to see how tastes and qualities behave in actual use.

Shingling a roof. Ordinary practical work which is accompanied by a valuable trying-out process

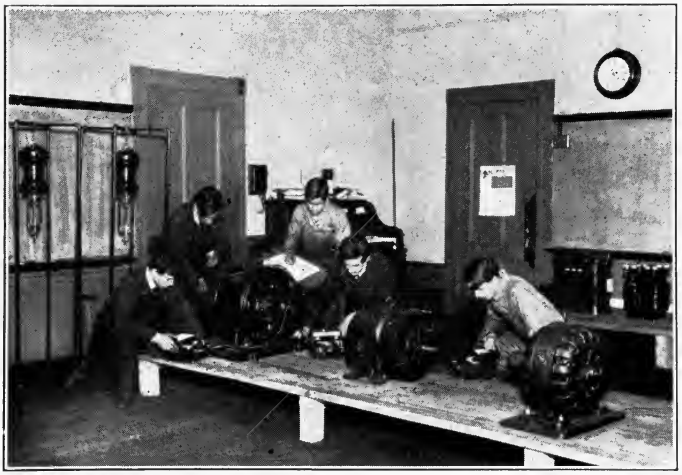
The interesting and instructive work in school gardens is often diagnostic of a child's capacities

Actual use is always the test. I had an idea, when I was a boy in college, that it would be an easy and attractive job to stand behind a counter and sell goods. So I tried it, Christmas vacations, in a book shop; Saturday evenings in a clothing store; one whole summer in a market. I soon found out that retail selling is not nearly so easy as it looks, and that my own vocation was toward another field. Meanwhile one of my mates, working beside me in the same stores, found the work precisely to his mind, and he is now a highly successful business man.

Some persons have recommended selling on the street or from door to door as an especially valuable method of trying out a boy's instinct for salesmanship. The advice is not sound. Good business houses do not put boys on the road. Such work is too severe for a youth.

The test for mechanical ability may be more difficult to make, for the kinds are many and the demands varied. Wiring a house for electricity, for example, is a very

different matter from managing a power lathe. Every boy ought, however, to do some carpentry — to make, let us say, a chest, a table, or a desk. He ought also to do some machine and forge work in iron, since in my experience it requires a distinctly different sort of boy to make good in iron than in wood. This much practical experience



A boy's particular aptitude for one of the varied mechanical occupations may be discovered in wiring a house for electricity

will at least separate boys with little or no mechanical ability from those who will never be happy without tools in their hands.

It would be an ideal arrangement if every youth could have a year on a farm. Farm life is so varied, so rich in all-round experiences, that nothing else can approach it either as training or as test. By the time a boy has gone the round of the seasons once, has cared for hens and horses and cows, has harnessed a tall and ugly steed, has driven a team, has plowed, harrowed, sown seed, and harvested

the crop, has put the farm machinery in order for the next year, and has finished off by chopping wood in the winter, he should certainly be in a position to know whether he is the one boy in every three in the United States who is destined to get a living out of the soil. Besides this, he will have learned more about himself, his gumption, his judgment, his perseverance, his common sense, his physical stamina, than anything else can teach him. He will also have shown his elders, and most explicitly, what manner of boy he is.

Harnessing a tall and ugly steed

These three tests, then, serve to distinguish, with virtual certainty, the three main types of bread-winner,—the artisan, the trader, and the farmer. Seven tenths of all boys will be one or other of these.

Nor must we forget that the school course is itself a valuable trying-out process. Music, drawing, essay writing, color work and modeling, reading aloud, gymnastics, organized and educational games, though designed

Courtesy of Superintendent of Schools, Boston

The athletic field tests a boy's moral and mental as well as his physical powers, and may reveal a special gift that points to a life work

for training are also tests. So too are the by-products of school life,— the athletic teams, the social organizations, the fairs and plays and excursions, and the rest. Any of these may reveal some special gift that points to a life work.

Moreover, we must not forget that our traditional school course — antiquated, impractical, one-sided, abstract, as we justly accuse it of being — does test to the full certain valuable types of mind. The ability to handle words, to learn from books, to work over ideas, to carry masses of fact, all these are essential to the successful office worker and professional man. Whoso cannot pass his school work with some distinction cannot hope to enter any one of several high callings.

If all these various tests, taken together, reveal no talent and no vocation, either to the youth himself or to his advisers, it becomes most probable that we have to do with an individual who, by nature, belongs to the class of unskilled laborers. There must always be a certain proportion of these in the world; but it is the business of the vocational guide to see that the group is recruited only from those who cannot do any better work.

For efficient vocational guidance the school must be closely articulated with the community life, its occupations, its resources, its traditions, and most especially with its homes. High, therefore, among the counselor's practical devices should be placed conferences with parents and the coöperation of school and household.

Parents themselves are not always good vocational guides. They are too near the child, and they are either unduly severe with his minor failings or, more commonly, they overestimate his virtues. Moreover, "like parent like child." The parent may be blind to his offspring's special quality because he is himself that special sort of person.

But the observing counselor may learn much from the child's home. It is from the parents, and especially from the mother, that she will inquire concerning matters of general health or special weakness. It will not do to let a boy whose lungs have been unsound take up granite cutting in New England or lead and zinc mining in Missouri even if careful oversight has suppressed all outward sign of defect. The trouble is still there, and will come out under stress. On the other hand, a child, apparently frail, may have been conspicuously free from serious illness and be capable of high efficiency under favorable conditions. Various temperamental matters—nervousness or its absence, general hopefulness of disposition, a number of moral qualities, even the family

Training in the household arts is an important agent in coöperating the school with the home

Learning to do things on the farm develops a habit of steady work and a love for it, and helps a boy to choose a life career

"expectation of life"—may influence the wise choice of a career. For all these, one must in large measure look to the home for information.

On the parents, also, one must often depend for medical or other expert opinion on the child's equipment, and for the correction of defects of body, of mind, and of character. For many reasons the coöperation of school and home is essential to a thoroughly efficient vocational control.

We must not forget, moreover, that one of the most valuable elements of future success, the habit of steady work and a love for it, is often more the product of home than of school training. In several different places now the schools are giving credit for domestic, mechanical, and farm work done at home. All adjustments of this

Children from good homes find in their play sound training for mind and will

sort presuppose the closest coöperation of home and school, together with frequent visits of the teacher to the domicile.

The initiative for all this will, in general, have to come from the teacher. Yet it is all part of the interaction of school and home which we need, for many reasons, to foster. Surely a consultation concerning the future career of a favorite child is a vastly better opening for friendly relations than is a case of discipline!

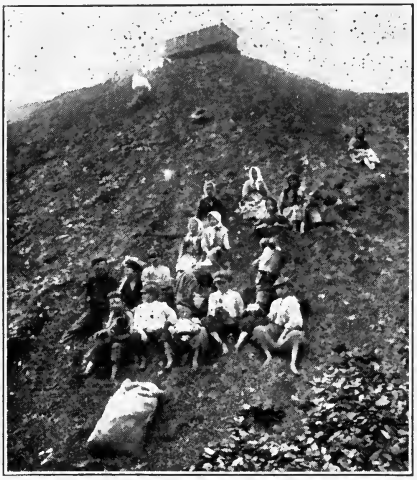
In seeking to establish such a relation, however, let the teacher beware especially of a too professional attitude. After all, there are more of the essentials of true culture, there is more sound training of mind and will, in the work, the play, and the general atmosphere of a good private home than in any public institution. School work

ought not, always, to come first. If the house-mother is taken ill and needs a helper, it is criminal for school officers to insist that a son or daughter shall not incur absence. At such a time the duty of any child, large enough to help, is at home. When, in any society, a girl becomes so busy with school work and music that she has no time to perform a reasonable share of necessary home labor, somebody is blind to the real aim of education. Character, devotion, family loyalty, are better preparation for life than an acquaintance with the properties of isoperimetrical polygons and the exports of Timbuktu. A recognition of these facts will go far to smooth the way of the vocational guide in dealing with the home.

Most important of all, however, in this relation of school and home, is the opportunity it gives the teacher to study the youth in his parents. Present-day scientific opinion is that virtually all the native qualities of the young are but recombinations of identical elements in the parents. The stream, proverbially, does not rise higher than its source. Neither does it commonly fail to attain its level. The actual performance of the father, of the two grandfathers, and of the uncles on both sides fixes pretty accurately the range within which the boy himself will operate.

We must not forget that, in spite of an occasional striking exception, men and women nearly always select their wives and husbands from about their own mental and moral grade. Husband and wife may be of very different type—one reserved, the other vivacious; one with an evenly rounded equipment, the other with some special gift—but taking one thing with another, most persons marry on their own level. In other words, each man is a fair match for his wife's brothers; each woman the equal of her husband's sisters.

The result is that the children, inheriting from two similar parents, are also of their sort; and the family holds its level pretty steadily for many generations. In short, the shrewd student of mankind, knowing the child's home surroundings and parentage, can prophesy with a good deal of accuracy the kind of person he or she will marry, the kind of home that will result, and the general economic and social status of the family.



Coal pickers. The grade of their vocation is largely predetermined

On the other hand, there is always the exception that tries the rule, the occasional fortunate individual who chances to get, all at once, all the good qualities of all his ancestors; and the luckless wight who draws all the blanks. One must keep in mind the black sheep which may turn up in any flock, and, on the other hand, the single boy or girl who stands apart from and above the family group. The discovery and encouragement of individuals of this latter class is one of the keenest satisfactions of the vocational guide.

A reasonably safe working rule is this. If the parents are thoroughly commonplace, mediocre persons, repeating accurately the qualities of their social type, then usually all the children will be like unto them. The grade of their vocation is predetermined. But if either parent shows

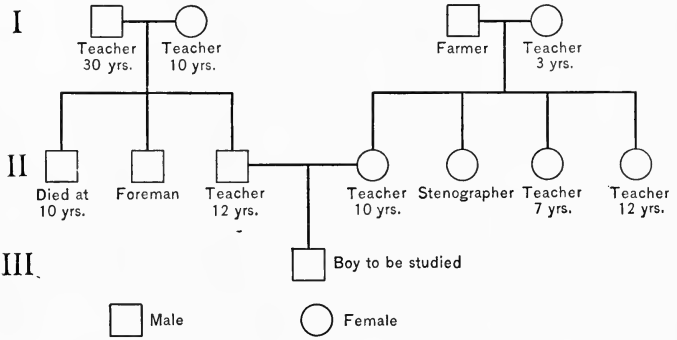
Basket weaving in the school often brings out in the child an inherited talent for mechanics or an eye for color

any unusual quality, no matter what, then watch for the exceptional child.

I dwell upon this point for the reason, among others, that it has recently been shown that a talent for mechanics is strongly hereditary, is in fact a special gift, like a singing voice or an eye for color. Now it happens, as we shall later see more fully, that mechanical ability is precisely the quality which just at the present time is commanding its own price in the business world. If, then, the father tinkers with tools during his spare moments, or the mother embroiders with special skill, this fact may be the key to the child's vocation. In general, however, any such special talent will appear in full force, or even enhanced, in one or two of the children, and be nearly or quite wanting in the rest. Unlike general mental quality, which tends to hold steadily throughout

the family, the special gift tends, if we may so express it, to condense in single individuals, as the moisture of an entire room becomes the frost on a single cold window pane.

It is highly important, also, for the children themselves to become interested in their own families. This they



In mapping his family tree, a child will often find the incentive for a successful life work

do naturally to a considerable degree, and a little encouragement will set them to looking up their relatives and mapping their family trees. We think, in this country, far too little of our families, their origin, their histories, of our own duties to them, and of the chance of bettering their status by wise alliances. At the least, the discovery of a family vocation or of a successful relative will prove not only an incentive to the child but a check on the unfortunate American tendency to break away from family traditions. This is also one of the channels through which the child may be led unconsciously to serious thinking about life.

CHAPTER VI

Further Methods of a Counselor

ALL this that has been said is, however, more or less general. Beyond it must come the detailed, accurate diagnosis of each special case.

For this the first essential is some adequate system of records. Ideally, this should be rather a school than an individual affair, and should include not only the school standing but everything that any teacher has noted.

In any case, whether the record is general or private, it should include home conditions and family traits, power of attention, promptness, accuracy, cheerfulness, readiness to take suggestion and obey orders, capacity for self-direction, self-reliance, resourcefulness, and capacity for leadership, all of which are at least as important for future livelihood as the class grades and the number of times tardy of the traditional school record.

The final method and form of such a register has still to be worked out. I may therefore be permitted to give, for what it may be worth, my own experience in an industrial school in which the conventional studies of grammar grades were combined with practical shop and farm work.

The system is based on the record plans which follow:

NAME_____ AGE_____ GRADE_____

Physical Life.

1. Height: Normal height for age.
2. Weight: Normal weight for height.
3. Lung capacity: Normal lung capacity for age.
4. Body: Height sitting; girth of chest; peculiarities.
5. Head: Circumference; distance ear to ear; general shape.

6. Face: Forehead, height; chin, full or receding.
7. Eyes: Sight; expression.
8. Ears: Hearing; abnormalities.
9. Nose: Breathing.
10. Mouth: Shape; teeth; lips; palate.
11. Hands: Strong; nervous; feeble.
12. Strength of back; of legs; of shoulders.
13. Peculiarities.

It is to be noted in this schedule that the first three items give at a glance the youth's relation to the average; while, together with the fourth item, they show his "vital capacity." The ear-to-ear distance, taken over the top of the head, with the head circumference and general shape, are a convenient measure of the size of the brain. The other items explain themselves, except the eleventh. Practically, it turns out that when a boy or girl is directed to hold out the hand horizontally, palm down, a normal individual, called "strong" in the schedule, extends the fingers close together and in line with hand and wrist; a nervous individual curls the fingers irregularly and seldom twice alike; while one of inferior intelligence drops the entire member flabbily. The reason for these differences is not entirely clear, but the test is most workable.

The average heights in inches of children from six to seventeen years of age are shown in the following table.[1]

AVERAGE HEIGHTS OF BOYS AND GIRLS

Year.....	6	7	8	9	10	11	12	13	14	15	16	17
Boys.....	44.10	46.21	48.16	50.09	52.21	54.01	55.78	58.17	61.08	62.96	65.58	66.29
Girls.....	43.66	45.94	48.07	49.61	51.78	53.79	57.16	58.75	60.32	61.39	61.72	61.99

[1] These measurements were taken without shoes. As only American children are included in them, the measures are slightly larger than the average. The American-born child is slightly taller than the English, Irish, German, or Scandinavian child. No comparative measurements exist for other nationalities. We should also note here that the periods of most rapid increase, both in height and in weight, are put from one to two years earlier by some writers. Doubtless food, nationality, and climate influence this. This table is taken from Bowditch.

BURK'S TABLE SHOWING AVERAGE WEIGHT OF 68,000 AMERICAN CHILDREN IN BOSTON, ST. LOUIS, AND MILWAUKEE

AGE	BOYS			GIRLS		
	Average in lbs.	Annual increase	Per cent of increase	Average in lbs.	Annual increase	Per cent of increase
6½	45.2			43.4		
7½	49.5	4.3	9.5	47.7	4.3	9.9
8½	54.5	5.0	10.1	52.5	4.8	10.0
9½	59.6	5.1	9.3	57.4	4.9	9.3
10½	65.4	5.8	9.7	62.9	5.5	9.6
11½	70.7	5.3	8.1	69.5	6.6	10.5
12½	76.9	6.2	8.7	78.7	9.2	13.2
13½	84.8	7.9	10.3	88.7	10.0	12.7
14½	95.2	10.4	12.3	98.3	9.6	11.9
15½	107.4	12.2	12.8	106.7	8.4	8.5
16½	121.0	13.6	12.7	112.3	5.6	5.2

Social Life.

1. Home: Owned; rented; health conditions; sleeping.
2. Father: Age; nationality; work; interests; habits.
3. Mother: Age; nationality; work; interests; habits.
4. Brothers: Characteristics; work.
5. Sisters: Characteristics; work.
6. Church: Pastor; church attendance.
7. Companions: Sociability.
8. Remarks.

Personal Record.

1. School: Mental ability; effort; initiative; special interests.
2. Work: At home; attitude toward work.
3. Play: At home; at school; special interest shown; leadership ability.
4. Mechanical ability: Drawing.
5. Trading ability: Habits of saving and spending.
6. Musical ability.
7. Literary ability.
8. Conversational ability.
9. Habits.
10. Special ability.
11. Sense of responsibility.
12. Ambition.
13. Remarks.

Character Study.

Underscore qualities possessed. Bracket [ ] those lacking. Several words are used with nearly the same meaning, for sometimes the teacher will catch a certain phase of boy life with one word and fail with the other.

1. Bright; memory; attention; reason.
2. Honest; truthful; frank; sincere; trustworthy; faithful; obedient.
3. Shrewd; long-headed; prudent; provident; saving.
4. Obstinate; stubborn; pugnacious; persistent.
5. Good-natured; social; pleasant; kind-hearted; affectionate.
6. Brave; braggart; bashful; modest.
7. Acquisitive; constructive; emulative; imaginative; imitative; dramatic.
8. Active; buoyant; hopeful; confident; ready; enthusiastic.
9. Prompt; intense; responsive; hasty; irritable; fiery; nervous.
10. Emotional; sensitive; secretive; conceited.
11. Sluggish; indifferent; stupid; depressed.
12. Ambitious; generous.
13. Independent; leader; easily led.
14. Remarks.

These items are stated in the positive form, for the reason that it is easier for many persons to detect the unfavorable points than the good.

There is no list of questions which will satisfy a good student of human nature. When all possible questions are asked, the most important analysis will be found under "Remarks."

The data for these schedules were contributed by the various teachers who had the boys in charge, by the gymnasium instructors, playground directors, matrons, and the like. In addition, there were frequent conferences among all these persons, the results of which were also filed away as part of the pupil's record. With these, in addition to every sort of measurable quality and bit of personal history, went a brief and pointed character sketch, repeated from time to time and by different persons. Not least important was the record from time to time of the boy's vocational ambition.

A few extracts from these records will illustrate their general scope:

A. B.

Father: Coal teamster; steady worker.
School: Poor in mathematics; good reader; poor letter writer.
Bright; good attention; good judgment; nervous; persevering.
Steady; cheerful and melancholic; has different moods; good worker.
Not strong muscular life; weak in legs.
Some handicaps; needs outdoor life; proved good in handling teams.

Worth noting here is the father's occupation, the boy's success with horses, his general mental type, and his weak legs. The parental vocation is at least strongly indicated.

C. D.

Age, fourteen; English.
Second grade in public schools; cannot add or multiply; very poor reader; cannot write a letter.
Dull; poor attention, reason, interest, and memory.
Shrewd; good judgment outside of school.
Active; lacks perseverance; unstable; brave; pleasant; cheerful; quick tempered.
Ambitious; leader among boys smaller than himself; very handy at work.
Hard of hearing; breathes through mouth.
Flat footed; very much undersized; weak muscles; good lungs; small head.
At eighteen in shoe shop. Doing well.

This boy seen in school would be judged nearly feeble minded. Seen among his playmates, he shows promising traits, which assure fair success in a low-skilled occupation. He has, as a matter of fact, made a decent living.

E. F.

Father: French; a carpenter.
Mother: French.
Four brothers; one sister.
Fair tenement; rent $14.

Catholic church; regular attendant.
Fifth grade in public schools.
Good in mathematics, especially fractions and percentage; good reader; writes a good letter.
Bright; imaginative; good interest; good powers of attention; good observation, memory, reason, and judgment.
Strong-willed; steady; persevering; shrewd; saving; careful of money, but generous; very independent.
Good looking; popular with boys; brave; modest; peaceful; ambitious.
Frank; truthful; well-balanced.
Pleasant; kind-hearted; cheerful; active; full of life.
Needs no discipline but kindness.
Good worker; very handy with tools.
Excellent records in manual training, sloyd, wood turning, and iron work at forge.
Ambition: To be machinist.
Made good progress in all his school work.
Physical measurements: Palate normal; teeth good; eyesight good; hearing good; small of his age; prominent gap in helix of right ear; ulceration of septum in nostril; good lung capacity; good muscular tests.

When a boy tests as high as E. F., the certainty of fair success in life is well assured. The records were made when he was fourteen, and at twenty-one he was a good machinist, earning four dollars a day. With ten years more of experience I expect him to become an efficient foreman. The combination of popularity, shrewdness, generosity, strong will, and independence warrant this expectation.

G. H.

Father: Leather currier.
Honest, faithful, trustworthy boy; persevering.
At fourteen in sixth grade; fair in school work; good in manual training.
Health sound; great muscular strength, especially in hands.
When he came to school he wanted to be a typewriter.
After experience in manual training and forge work, wanted to be a blacksmith.

Clearly, in this case, the change of ambition was a wise one.

It hardly needs to be pointed out that records such as these should be continued after the pupil leaves school as a check on the teacher's prognosis. With the best of skill and care there will always be some records like the following:

I. J.

An American boy.
Left grade five at twelve years old; is puller-off in glass factory.
Teacher's estimate: Dull; below average in scholarship and deportment; incapable of acquiring high skill.
Employer's estimate: Bright; capable of acquiring high skill; good character; "elegant boy."
Initial wage, $3.60; present wage, $6.
Highest position will probably be glass blower, in six years, at $30 a week.

The details of such a scheme of records will have to be arranged by each school for itself. The general idea alone is emphasized here. Frequent conferences between experts, complete record of facts, and pithy character sketch are the essential elements. The latter especially, done once or twice a term, is an unsurpassed device for educating oneself in the exploration of child nature; no formal schedule of qualities is adequate without it.

Besides conferences among teachers and parents, there should be conferences with the pupils themselves. These should be as informal as possible—at least they should seem so to the child; the teacher may prepare for them as carefully as she likes. Perhaps the boy remains after school to make up lost work or to receive special help. The teacher says casually, "What are you going to do when you grow up?" If this elicits a definite reply, the natural question is, "Why did you think of that?" and the tactful adult is on the way to the lad's full confidence.

If he has no definite idea, the teacher suggests, "What do you think of carpentering, or storekeeping?" selecting the work of his father, or anything that seems fitting for his case. It is surprising, oftentimes, how intimate is the resulting self-revelation. Most adolescents, though they say little, ponder deeply on their life work.

Caring for animals is a good test of a boy's aptitude for agriculture

A device often employed with success is the use of vocational topics as subjects for regular school essays. Such themes tend both to develop a serious attitude toward the question of a career and to show which pupils are already thinking seriously about their future. Not seldom, also, in the course of such writing, is the veil lifted from some secret ambition, or the clew given to success with some shy girl or boy.

Subjects like the following will be found workable. These will in turn suggest others, but one must have a sense of the fitness of things, and not, as I have known one teacher do, assign as an essay topic in a rural community, "Why I am Planning to Leave the Farm"!

1. Suppose there are in your town five successful men. One is a farmer; another is a builder either of houses or of engines or of ships; a third is an engineer in charge of a mine, a machine shop, an electric power station, or the construction of a railway; the fourth is a business man conducting a store; while the last is a professional man, —lawyer, doctor, clergyman, teacher, or editor. Suppose, now, that one of these men would take you about with him during his day's work, show you everything he is doing, and answer all your questions about it, which of the five had you rather it would be? Give three questions you would like to ask him.

2. If you were to visit a great International Exhibition, where you could see among other things, splendid grounds and buildings; beautiful fountains and electric lighting effects; great collections of manufactured goods: cotton, woolen, silk, leather, iron, steel, and the different processes of manufacture; varied agricultural exhibits: horses, cattle, fruits, grain, vegetables, lumber; machines of all kinds: engines, plows, harvesters, reapers; exhibits of art: painting and sculpture; educational and governmental exhibits; men, women, and children of all nationalities; military and naval displays; what exhibits would interest you most?

3. What kind of books do you like to read? What are the characters in these books that you remember and most admire? What persons of your acquaintance do you admire, and what are the reasons why you like them?

4. What experience have you had in the following kinds of work or play:

Agriculture. Have you ever tried caring for animals, planting, cultivating and harvesting crops, fruit growing, dairying? How did you succeed?

Mechanical Work. Do you like to draw? What kind of work have you done in wood or iron? Describe any

kind of mechanical work you have done, and give reasons for your likes or dislikes of mechanical work.

Trade. Do you like to barter with other boys? What have you bought or sold, and with what success?

Games. What games do you like best, indoor or outdoor? Do you ever direct or start the games? Have you ever led in games or sport of any kind? Write your experiences.

Four high schools in New York City, developing this general scheme, now require the pupils to prepare regular plans for their future careers, including a study of their own capacities. The following are suggestions along this line: Let the student select an occupation, find an acquaintance in that work, secure an interview, and write out the results of the interview for a newspaper; select an occupation and plan for himself a life-career; write a review of a book dealing with his particular occupation; write an answer to a newspaper advertisement for help in his line of work.

Subjects for debates: Discuss opportunities in one line of work, against those in another; requirements for success; profession against a trade.

The following plan for a life career was used in the high schools of Brooklyn:

I. (*a*) Preferences.
   (*b*) The expressed wishes of his parents and friends in regard to his future.
II. (*a*) His own reasons for his choice.
   (*b*) Reasons in favor of or against his choice gleaned from books or magazine articles.
   (*c*) Arguments in favor of or against his choice which were advanced by parents and friends who were consulted.
III. His personal characteristics, by the aid of which he hopes to win success in his chosen vocation.
IV. The requirements for admission to his chosen trade or profession.

V. The schools to be attended to meet these requirements and the estimated time and expense involved in preparation.

VI. The possible rewards, as stated in the authorities which were consulted.

With pupils thirteen or fourteen years of age or older, the teacher should be able to conduct a written examination with some success. Professor Parsons used this method before he held a personal conference with a boy or girl; and even now we can get some of our best suggestions from this pioneer counselor. To be sure, the persons with whom the professor worked were as a rule much older than pupils in the elementary school, but many of his questions will be found practical. He was accustomed to hold personal conferences with each applicant before and after the written examination. And before he handed the applicant the long list of questions for him to answer in writing, he talked to him as follows:

"Some of these questions can be answered very definitely. In respect to others, the character questions for example, you can only make estimates more or less imperfect and subject to revision. Some questions you may not be able to answer at all without assistance and careful testing, but do the best you can. Consider every question carefully, try to form a good judgment on it, and state the test or evidence you rely on in making your judgment. A thorough study of yourself is the foundation of a true plan of life. Deal with the matter as though correct conclusions would mean ten thousand dollars to you; a true judgment of yourself may mean more than that. Stand off and look at yourself as though you were another individual. Look yourself in the eye. Compare yourself with others. See if you can remember as much as the best of your companions about a lecture or a play you have heard together, or a passage of a book you have both read. Watch the people you admire. Note their conduct, conversation, and appearance, and how they differ from people you do not admire. Then see which you resemble most. See if you are as careful, thorough, prompt, reliable, persistent, good natured, and sympathetic as the best

people you know. Get your friends to help you form true judgments about yourself; and, above all things, be on your guard against self-conceit and flattery. Test every element of your character, knowledge, mental power, appearance, and manners as well as you can. And then bring the subject to the counselor."

No one can read these words of Professor Parsons without feeling the fine seriousness with which the first systematic vocational guide gave himself to his mission.

The following are samples of the kind of questions which a counselor can give for the pupil to write out alone at home, with his parents, or in school:

I. *Physical Characteristics.*

1. Age.
2. Height.
3. Weight.
4. How tall should a boy (or girl) be, and how much should he weigh at your age?
5. Lung capacity.
6. How many times have you been sick?
7. How many days of school have you lost because of sickness?
8. How far have you ever walked?
9. In what time can you walk a mile?
10. What diseases have you had?
11. What is the health and general physical condition of father, mother, brothers, and sisters?

These questions of health and strength are very important and should always be taken into consideration in the choice of a life work.

II. *A Group of Questions about the Family.*

1. What are the vocations of older brothers or sisters?
2. Why did they select these vocations?
3. What is your father's vocation?
4. What prominent ability has he shown in his occupation or outside of it? If the father is a farmer, but very much interested in horses, this particular interest or any other should be recorded. If the father liked to trade horses, or repair machines, these special interests or abilities should be carefully noted.

5. What is the occupation of your mother?
6. What are her deepest interests in life—music, art, nursing, and the like?
7. What are the occupations and marked talents of uncles and aunts on both sides of the house?
8. What were the occupations of grandparents and granduncles?

Sometimes the ability of a family is so marked on both sides that it gives at once the clew to the direction in which the youth's best abilities must surely lie.

III. *A Group of Questions about Family Resources.*

1. How long do you intend to go to school?
2. How far will your parents help you in your education?
3. Do you like your father's occupation?
4. What initial advantages will you have if you enter your father's occupation?
5. Can your father or mother help you to make a success in this line of work?
6. How far has your training fitted you for this line of work?

The question of resources should be very carefully considered by every youth. Professor Parsons used to tell his boys: "If the father or uncle or any relative has a good business into which the boy can grow, with the prospect of adaptation and efficiency, the burden of proof is on the proposition that this foundation should be abandoned and another building started on a new site."

IV. *A Group of Questions in Regard to School.*

1. Do you like to study?
2. What studies do you like best?
3. In what studies do you make the best, and in what the poorest, records?
4. How do you spend your leisure time in school?

V. *A Group of Questions in Regard to Play.*

1. What games do you like to play?
2. Do you ever start the games?
3. Who are your playmates?
4. Do you like to fish, to hunt?
5. Do you go swimming? How often?

6. What do you do in your free time at home?
7. How do you spend your evenings at home?
8. Do your parents ever play with you?

VI. *A Group of Questions in Regard to Mechanical Ability.*

1. Do you like to draw?
2. Are you skillful in manual work?
3. What tools have you used?
6. What have you ever made?
7. Do you like to work on machines?

VII. *A Group of Questions in Regard to Trading Ability.*

1. How have you earned any money?
2. How do you spend it?
3. How much have you saved?
4. Do you like to buy and sell?
5. What have you bought or sold?
6. Describe one of your shrewdest bargains, and tell how you made it.

By way of illustrating the way in which these methods work out in practice, I cite a couple of cases of my own.

One pupil, from his first entrance, insisted that the one thing he wanted to do was to drive horses. I paid little attention to the statement, thinking it merely one of the youthful "fire-engine ambitions." Later on, when the essays came in on "What I am going to do for a life work," this boy still remained fixed in his desire to drive horses. His teacher, therefore, called my attention to the case, and I talked once more with the boy. I listened to his reasons, studied his record, and decided that he was right. I therefore found a place for him to try his hand on one of the school teams. This he handled, happily and with success, so long as he remained in school.

Another lad, a little red-headed Scot, said in one of his essays that he wanted to be a printer and go to work in the school printing shop. His instructors reported that he had uncommon mastery of English for his age, while

his general record opposed no obstacle. He worked well at his new trade. In six months he was assistant editor of the school paper. On leaving school he entered a printing office, and has been doing well ever since.

All this is, however, but general suggestion as to methods which have been found to work. The last idea that any reader should get is that any of them can be

Courtesy of Superintendent of Schools, Boston

The boy in whom there is the making of a printer often finds his life work in the school printing shop

carried out in any mechanical or wholesale fashion. Always must the individual teacher deal with the individual pupil, and trust, by some means, to be able to help and guide some puzzled young soul.

Not a little of the foregoing, it is hardly necessary to point out, will also have to be adapted to various ages and conditions. Taken "for substance of doctrine," the final result of all these several devices will be to assign each boy or girl, in the teacher's mind or on her formal records, to a definite place in some scheme of classification.

The selection of a workable grouping is essential for any sort of clear thinking on these important problems.

Practically, one has to employ several classifications, according to the point of view of the moment. The main thing is to keep them apart in one's mind, and not, as the logicians express it, to cross-classify.

The most familiar grouping, and the most useful on the whole for general educational purposes, is the old-fashioned division into:

Defectives. Those who should not be in school at all.

Dullards. Those who are two or more grades behind their proper age.

Mediocre Children. Those who barely reach grade, or lag less than two years behind.

Bright Children. Those who are one or two grades ahead of their age.

Exceptional Children. Those who are more than two grades up.

Essentially the same classification, but in a more scientific guise, is that of the Binet-Simon or other similar "intelligence tests." Persons, whether children or adults, are graded by their "mental age"; that is, by their ability to do the kind of thinking which is characteristic of the average normal child who has lived this, that, or the other number of years, without regard to the particular matters which he may or may not have been taught. Adults are:

Normals. If they test thirteen years or above, a thirteen-year-old mind being quite adequate for self-support at unskilled bodily labor or for dropping a strip of paper into a ballot box.

Morons. If they test below thirteen, but above eight. These also vote, and make some sort of living if minutely overseen. Otherwise, they become tramps and minor criminals.

Imbeciles. If they test below eight years.

Idiots. If they test below three years, and therefore cannot be taught language or attend to their bodily wants.

The grade teacher will encounter an occasional imbecile, and a good many morons. Three per cent of the school population is a fair average for the latter. But single schools have been known to split even between slightly feeble-minded and normal, while industrial and reform schools have usually about one half their pupils classing as defective.

The new classification articulates with the old through the fact that the mind of the defective may begin young to slow down its rate of growth, sometimes as young as three years. Any child, therefore, whose mental age lags one, two, three, or four years behind his bodily age, or on the other hand, runs one, two, or three years ahead, fits at once into the old-fashioned school grouping. But the merit of the Binet scale is that an expert, in a half-hour, can place a complete stranger more accurately than can the most sympathetic teacher in a whole term. Its limitation is that it tends to break down after just about the age when the average boy or girl is getting ready for the high school and is in special need of vocational assistance.

In general, the best advice to give the parents of a defective is that the child shall be immediately taken out of the public schools and placed in some special institution fitted to his peculiar limitations. In the best modern refuges, like that, for example, at Vineland, New Jersey, the moron is far happier, safer, and more useful than he can possibly be exposed to the buffetings of the normal world. Once settled in such an institution, he should spend there his entire life.

Dullards also are now being placed in special classes. Otherwise they have to remain in school, where they

receive the largest share of the teacher's time and energy, and to small profit. In the end, they are destined to become "hewers of wood and drawers of water" for the better endowed. Since they must, in any case, enter the ranks of unskilled labor, there is commonly little gain in prolonging their school life after it ceases to appeal to them.

Persons of mediocre ability include, naturally, the great mass of mankind. They are fitted to enter the commercial world, to become office workers, counter salesmen, and the like, or to undertake the low-skilled mechanical occupations.

Bright or exceptional children should, as a rule, look forward to the highly skilled mechanical occupations, or plan to become traveling salesmen, foremen, superintendents, or proprietors in the business world. From these, also, is recruited the professional class.

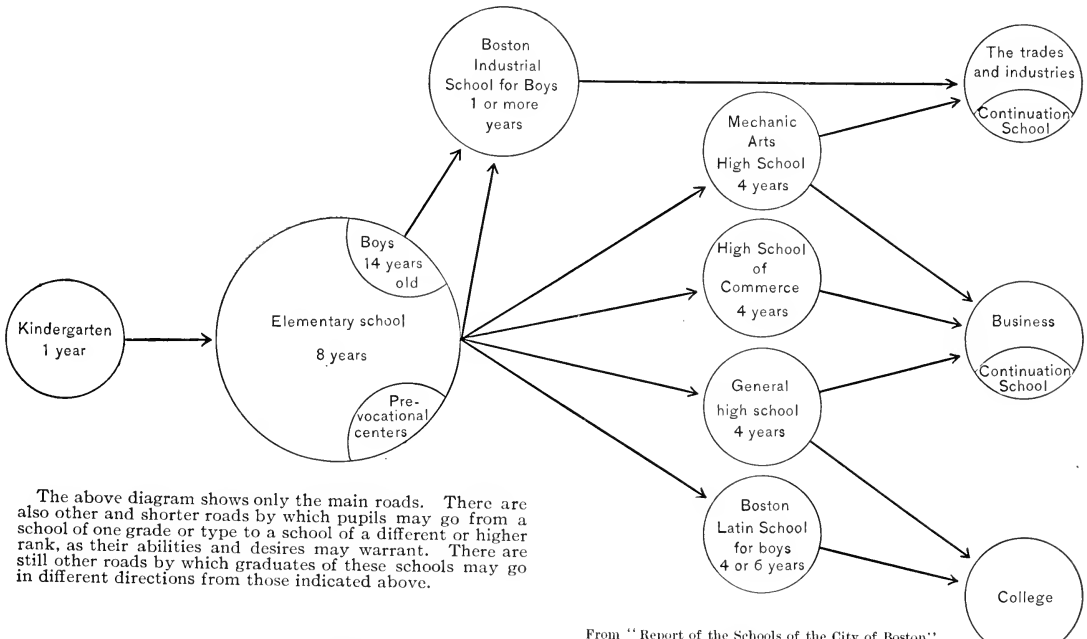
Outdoor occupations are an important feature in the upbuilding of delinquents in the Industrial Home for Girls at Geneva, Illinois

General efficiency in association with other boys and girls is a good test of ability to attain high-grade work

In all this, however, the teacher must beware of basing her judgment too much on brightness or dullness in books alone. General shrewdness and efficiency on the playground, in the shop and laboratory, in association with other boys and girls, are also tests of ability to attain to the higher grades of work in the world.

Another helpful classification is on the basis of probable educational opportunity.

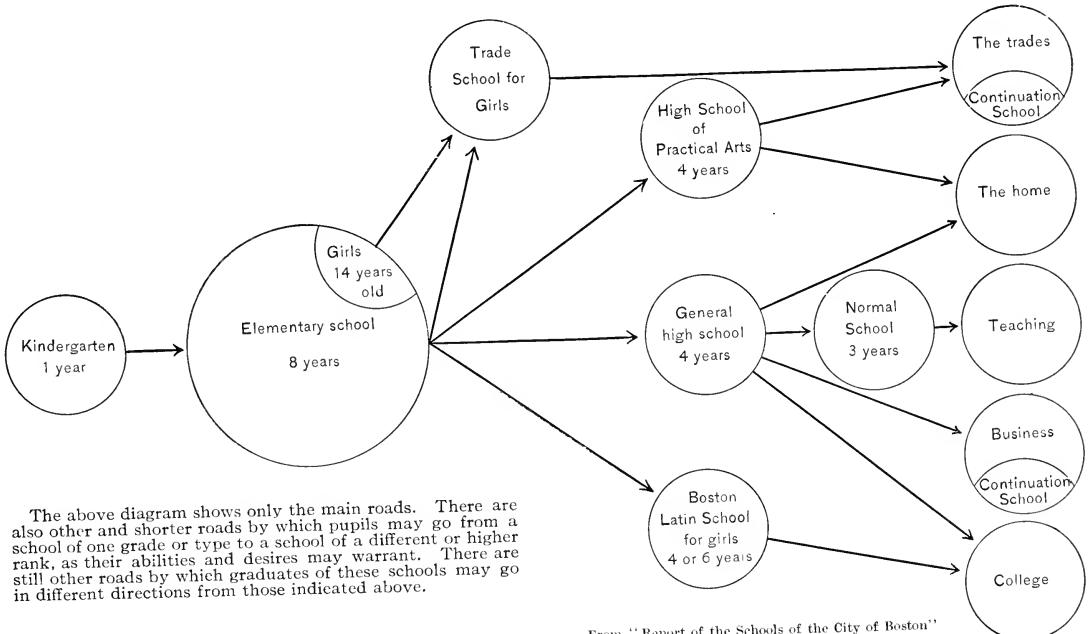
Class I. Those who must leave school at fourteen and go to work. This, in a school given over completely to book work, may often be the best thing for the youth. Pupils who have lost interest in study and yet keep on attending school merely because it is expected of them, are likely to acquire little except unwholesome habits. Such need the education of labor and of practical life. But the contrary case, where the youth would profit by further training and yet cannot obtain it, is a disgrace to the community. It is also very poor economy on the



The above diagram shows only the main roads. There are also other and shorter roads by which pupils may go from a school of one grade or type to a school of a different or higher rank, as their abilities and desires may warrant. There are still other roads by which graduates of these schools may go in different directions from those indicated above.

From "Report of the Schools of the City of Boston"

Main school roads a boy may travel in Boston



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From "Report of the Schools of the City of Boston"

Main school roads a girl may travel in Boston

part of society. In such cases the sympathetic teacher with some ingenuity may often serve the community as well as the pupil by obtaining financial assistance from some level-headed business man, not on the basis of charity but on a sound business basis.

Class II. Boys and girls who can take one or two years beyond the elementary course in industrial, normal, trade, or business school.

Class III. Boys and girls who can continue their education through the high school.

Class IV. Boys and girls with unlimited resources and an ambition to obtain the education which equips them for highest service.

Another helpful classification is as follows:

Class I. Youths who are like their parents and would therefore naturally follow the work of their parents, whenever these are in well-selected occupations. In these cases, parents and teachers, after consultation, should coöperate to lead the boy or girl, by reading, experience, and tactful suggestions, into the parental work.

Class II. Youths who show no special tendency, but who with good training could do successful work in one of several vocations. Children without marked tendencies should at first be guided toward the vocation of their parents, especially where family resources will give them a favorable start. This course should be followed until a different line of work makes its own demands upon them.

Class III. Youths who are very different from their parents, and have marked tendencies in other directions. Often such boys and girls will already have made up their mind just what they want to do. This decision, whether the counselor himself considers it right or wrong, should be very carefully respected.

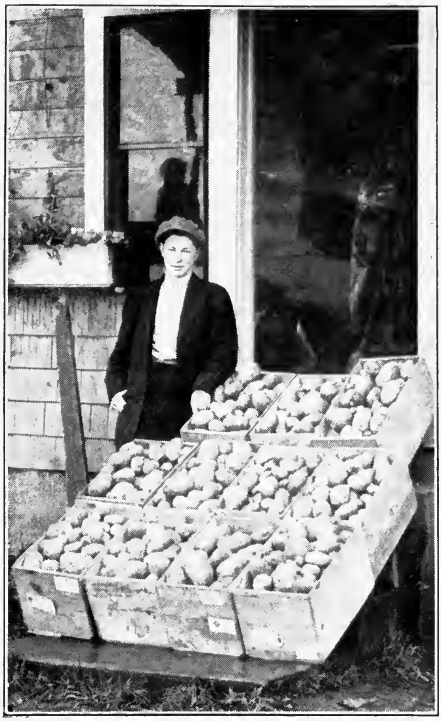
Children of this class go to work as young as the law allows

Finally, there is to be kept in mind, especially in considering families, the five great non-competing social groups of the economists. Practically, even in the most democratic countries, these groups are very nearly fixed castes. Few indeed are the persons who change their station or marry outside the one in which they were born. These are, in order:

Group I. Persons whose labor is almost entirely muscular, although they need not necessarily do heavy work. Children in this group go to work as young as the law allows, obtain their maximum wage as soon as they are full grown, are paid by the day, marry early, and rarely save anything toward their old age.

Group II. Persons who, in addition to operating their muscles, have to exercise some judgment or alertness of mind. Here belong most mill operatives, miners, and

the vast horde of factory workers who fill boxes or paste labels. Their work is utterly monotonous and pay is by the week, but rarely sufficient to permit any saving. Education commonly stops, at the very latest, with the grammar school.



His own efforts should carry this boy far. Eugene Dumond, Albany, Oregon, and the twelve bushels of potatoes he raised in one year from a single potato

With both these classes the chief concern of the vocational guide is to get the children out of the station in life in which they are born.

Group III. This is the aristocracy of the manual laboring class. All skilled workmen belong here and certain small farmers, as distinguished from farm hands. Here, for the first time, we meet pride of occupation, the general ownership of a little property, education carried beyond the grammar school, and marriage postponed till there is some prospect of supporting a family. No other social group offers such varied or difficult vocational problems as this.

Group IV. This is the so-called "middle class." Though

its income is not much greater than that of the preceding, it saves more frugally, refrains from early marriage, and puts its children into the high school. From this group are recruited the clerical and intellectual occupations—the bookkeepers, stenographers, nurses, salesmen, traders, foremen, managers, school teachers, principals, superintendents, lawyers, doctors, ministers. Most farmers also, though they work with their hands, belong to this division. This is especially the group where individuals expect to rise by their own efforts, and where the vocational guide should be most keenly on the alert for unusual ability or special gifts.

Group V. This includes the well-to-do, who obtain property by inheritance or reckon their incomes by the year. Earning power usually begins late and increases until well past middle life. The children have unusual educational advantages, but present a very difficult problem to the vocational guide. This group is also a most promising field, for here are often found rare talents which without proper and skillful vocational guidance are frequently headed in unsatisfactory directions.

For a more extended discussion of the use of questions and examinations, and examples of the guidance of more mature students, read *Choosing a Vocation*, by Frank Parsons.

CHAPTER VII

Men, Women, and Work

WE turn now, as preliminary to the general problem of vocational education, to the present industrial situation in the United States.

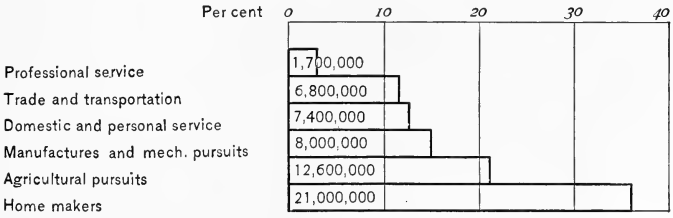
Of every one hundred persons in this country who have to be fed, clothed, housed, and otherwise provided for by somebody, thirty-nine are too old, too young, or too feeble to work. Of the sixty-one who are able, twenty-three are home makers, not working for direct wages. This is the largest, as well as the most important, group of useful persons in the world.

Only thirty-eight in every one hundred are left for all the outside labor of the world. Some of these are on their vacations; for some it is the slack season or hard times; for others there is an inefficient social adjustment which brings about an excess of workers in one field while there is a corresponding dearth in another, or else the individuals are inefficient and so fail to fit into the industrial scheme. For these and other reasons only eighty per cent of the industrial workers of the world are at work at any one time.

Only thirty and one half persons in each one hundred, therefore, are left to do the world's work outside of the home. Of this thirty and one half, eleven and one half are engaged in agriculture; eight and one half in manufacturing and mechanical work of all sorts; six in domestic service — hotel waiters, barbers, housemaids, cooks, laundrymen are in this group; five are in trade and transportation; and one and one-half in the professions.

In other words, out of every one hundred persons eleven or twelve are producing the raw material for "consumers' goods"; eight or nine are elaborating it to its final form; five are putting it into the hands of the consumer; twenty-nine are taking care of the rest, and forty-six are not at the moment doing anything. The actual producers are only twenty in one hundred.

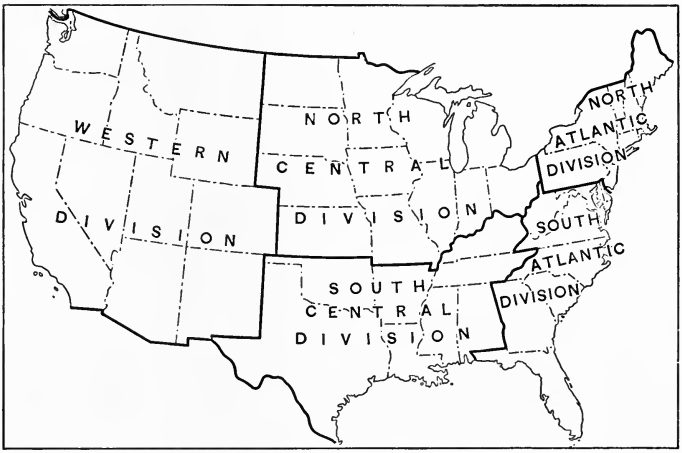
In round numbers, therefore, there are in the United States something more than twenty-one million women who



Estimated proportion of persons engaged in occupations, 1910

give their entire time and energy to housekeeping and home making. There are about twelve and a half million men who give their entire time and energy to raising foodstuffs and raw materials of all sorts which come out of the ground. Nearly nine million, both men and women, are artisans or manufacturers; seven and one-half million are engaged in personal and domestic service, and six and three-quarters million, in trade and transportation. One million and three quarters are in the professions.

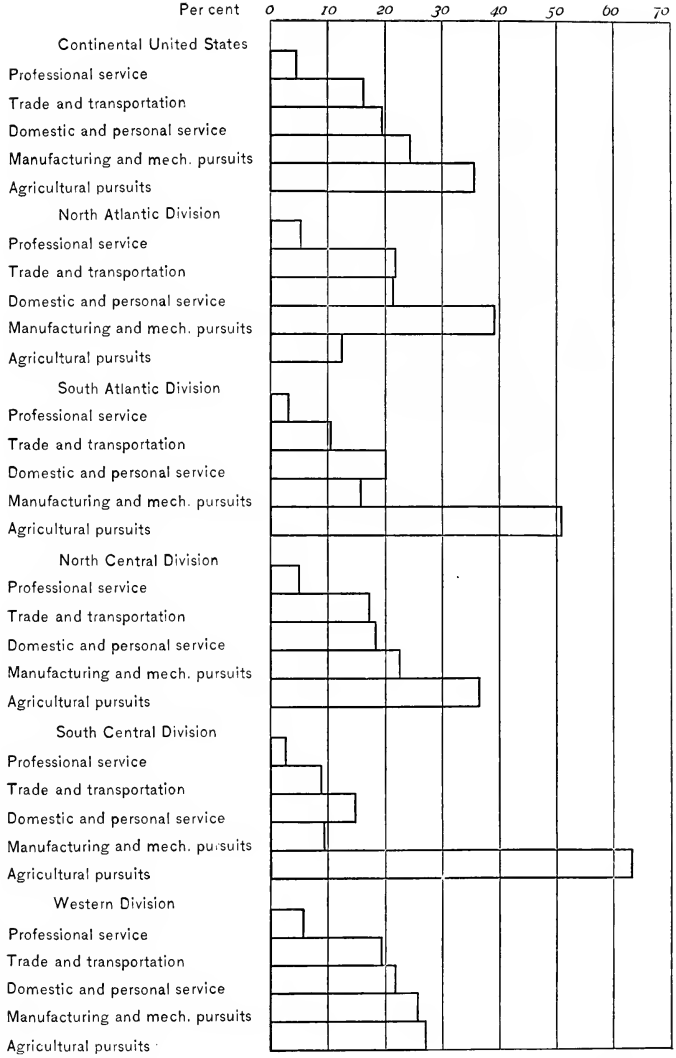
For our present purpose, however, the distribution of industries throughout the country is less significant than in one's own locality. If we divide the entire United States into five groups of states, as outlined on the map on page 114, the following diagrams will exhibit at a glance the marked differences in the vocational problem presented in the different states.



The five divisions in which the states are grouped for comparison of occupations

Fortunately for the welfare of our land, home making is a nearly constant factor everywhere in the country, except in the Western division, where the per cent drops, not because women are unwilling to be home makers but because their number is few. The highest of all occupations absorbs almost half the available labor. The professions, too, are somewhat constant in their demands, but outside these two groups the local difference is considerable.

We have already noted that four fifths of the children born in any state continue there for the greater portion of their lives, while no fewer than nine tenths remain in the same state group. We can, therefore, by knowing the distribution of industries in any state, prophesy pretty accurately what will become of most of the boys and girls in its schools. The teacher can obtain lists of the occupations and numbers of workers of her state and city (if the population is more than 25,000)



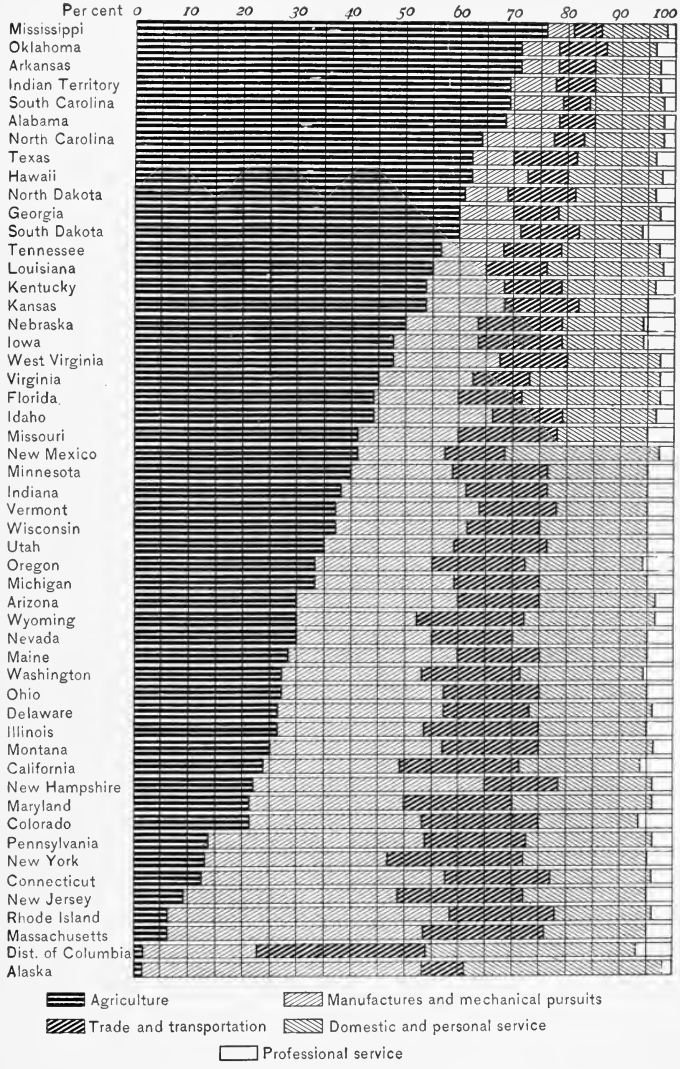
A proportional comparison by geographic divisions of persons engaged in each class of occupation

similar to the lists for the United States found in the Appendix of this book.

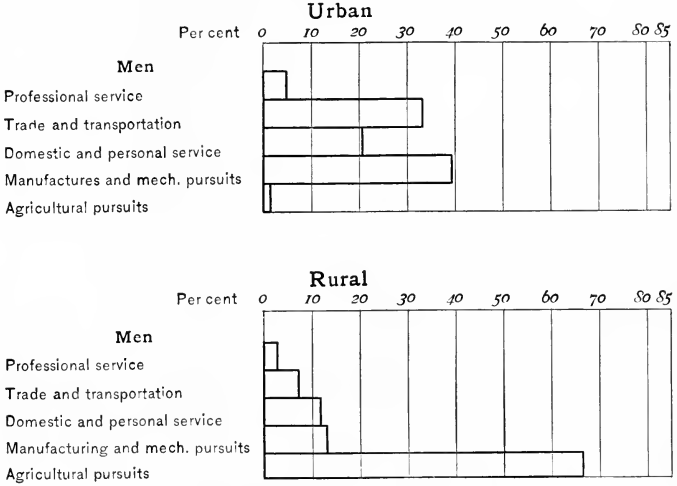
In Massachusetts, for example, forty-six out of each hundred boys will get their living in mechanical pursuits or in manufacturing, while only five will support themselves by agriculture. In Iowa the proportions are nearly reversed; forty-seven out of each hundred will work on farms, and only sixteen enter shop or mill. In Mississippi seventy-six per cent of the inhabitants are engaged in agriculture, while fifty-two per cent in little Rhode Island are occupied in manufacturing. Oddly enough, New Mexico has the largest proportion of persons who earn wages by domestic, personal, or unskilled service, and California of professional men and women. The chance that a California-born boy or girl will enter law, medicine, teaching, or the like is a half greater than for the country at large.

But while the Southern States are strong in agriculture and weak in manufactures, and the North Atlantic States weak in agriculture and topheavy with manufacturing, the older North Central States,—Illinois, Ohio, Indiana, Michigan, and Wisconsin,—have retained their preëminence in agriculture while at the same time they have become the leading manufacturing states of the Union. With their fertile soil and rich beds of coal, oil, gas, iron, and copper, they are virtually independent of the rest of the world, except for shoes and clothing. Children, therefore, born in this section may turn to almost any occupation with equal ease.

More interesting and suggestive still does this study become if we note the vocational differences between men and women and for both country and city as seen in the accompanying diagrams. In the large cities thirty-three boys in every one hundred will enter either trade or



Proportions of persons in each class of occupations by states

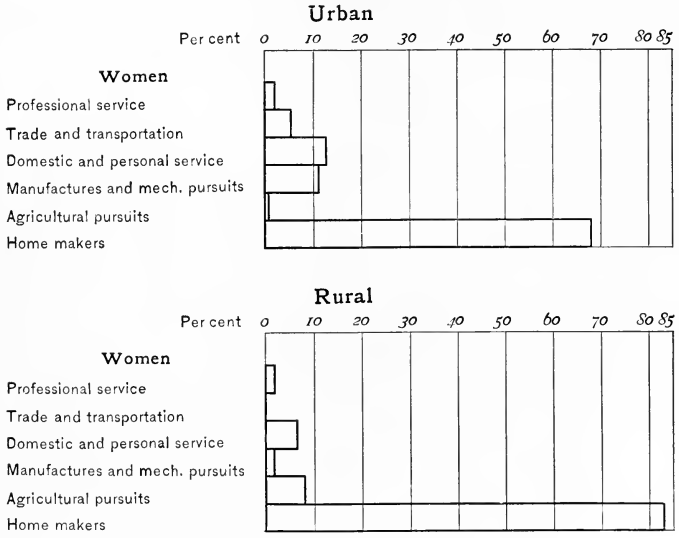


A relative comparison of opportunities for boys in city and country

transportation, and forty will enter the mechanical and manufacturing vocations. These two groups make a demand for seventy-three out of every one hundred city boys, and they foretell, beyond all question, where the vocational guide in the city must give her chief attention.

In the cities about thirty girls out of every one hundred are found constantly in the three groups, trade and transportation, domestic work, and manufacturing. Reckoning for the frequent changes of those who enter and afterward drop out, somewhere about fifty girls will enter these vocations for a longer or a shorter period. The charts show at a glance that the country girl is very much handicapped in the choice of work between school and marriage. The coming of the consolidated schools, it is hoped, will help to remedy this unfavorable condition.

In the strictly rural communities from seventy to

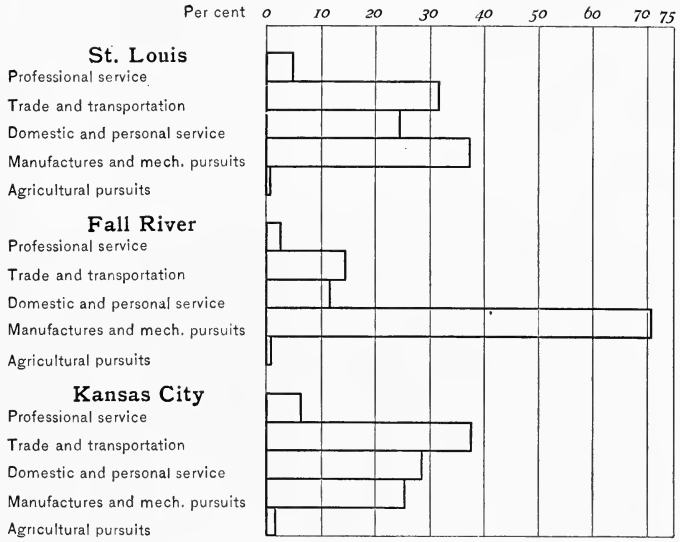


A relative comparison of opportunities for girls in city and country

eighty boys who remain there do farm work, for the domestic group is largely composed of the unskilled and unclassified farm workers. Ten or twelve boys will do mechanical work. To be efficient as a counselor the rural teacher must focus her interest on agriculture and the farm home.

Cities differ from one another even more than states. This may be seen in the diagram given on page 120, which shows the distribution in three especially interesting cities.

In general, the cities run to trade and manufactures and the country to agriculture, but the local variants are many, and one of the first duties of the vocational guide is to look up her neighborhood in the United States census and make sure as to just what are the actual opportunities which the locality offers for each particular sort



A comparison of occupations in St. Louis, an all-round city, Fall River, which specializes in one or two products, and Kansas City, Mo., the trading point for a large area

of boy and girl. Worth noting, also, is the fact that although the urban population is now increasing three times as fast as the rural, the latter is still in excess, by seven and four-tenths per cent.

Among cities, too, as among states, there is the same distinction between those which, like Philadelphia and St. Louis, distribute their manufactories over almost the whole possible range, and those which, like Paterson or Fall River, specialize in one or two products, and are concerned with little else.

Always, however, in all vocational work in the schools, the teacher must keep in mind the double aspect of the subject. She will guide the boy or girl to a wise choice of a life task and to an adequate preparation for it, but

she will also use this life-task motive as a spur to the daily work of the schoolroom.

The distribution of industries in the states and cities of the country, which we have already touched upon from the side of the first of these objects, lends itself with peculiar efficiency to the second. In no way can the

Courtesy of Oregon Agricultural College

A class judging sheep. One phase of a life-task motive which may be made a spur to daily school work

routine study of geography be made more stimulating or more profitable than by giving the ancient topic a vocational turn. School geography has always been, in a large measure, industrial. It may with profit be made also vocational.

Much might be said of the distribution of industries by states, of the need of cotton for more heat but less moisture than corn, and of the higher resistance to cold of wheat than of either, and the resulting distribution of produce throughout nearly half the United States; or, on the other hand, of the all-round farming states like California, New York, Pennsylvania, Ohio, or Michigan.

Climatic conditions, the occurrence of petroleum, coal, natural gas, iron, or the precious metals in one spot rather than another will not only fix the vocation of countless children in the schools, but they may, in addition, be utilized to show the child how his most immediate personal problems are tied to remote causes and to his school work, which explains them.

Much of this, however, the teacher can easily develop for herself. We pass, therefore, to certain illustrations of the problem presented by the characteristic industries of cities. Children have long been taught that Cincinnati, Louisville, or St. Louis have been made by their rivers; and that Boston, New York, Philadelphia, Baltimore, San Francisco, or Portland have been created by their harbors. Water power explains Minneapolis or the manufacturing cities of New England. The railways account for Denver, Omaha, and Spokane. Half the people of New York State, and all but one of the large cities, are strung along the old trade route between Buffalo and the sea. Beyond this, however, lies the whole field of human endeavor and human history. Leavenworth, once a fair match for Kansas City, has been quite overshadowed, for no reason in the world except that the citizens of the latter town pushed just a little harder and got their bridge across the river built first. Lynn is a growing city, and the most famous shoe town in the world, while its neighbor Salem, once the rival of Boston, lives largely on its past glories, for no other reason than that John Dagyr, when he came over from Wales, chose to settle in Lynn and not somewhere else to start his factory. Cohoes, New York, has become the seat of the knitting industry because one of its citizens, already a manufacturer, invented the power knitting machine. Gardner, Massachusetts, is given over to chair making

Immigrant labor has made New York a center for ready-to-wear clothing

because, it is said, a Gardner man with managing ability made practical use of a neighbor's invention. Troy, New York, simply started to make collars and cuffs and, having started, held its lead. Johnstown makes gloves because Sir William Johnson, in 1809, brought over glove makers from Scotland, and these sent for their friends. New York makes ready-to-wear clothing because, being the great port of entry for the country, it gets first chance at vast numbers of low-priced workmen. But who can say why it prints so great a quantity of magazines? Paterson, New Jersey, and other cities like it, make silk because the industry offers light work to women whose "men folks" are employees in near-by iron and steel works.

If, then, the teacher will study, for herself and with her pupils, the reason why particular industries are open to boys and girls in her particular vicinity, she will at once

find herself in the midst of some curious problems of occupational geography and of occupational biography. Local conditions and local history will take on a new meaning. This local work, in turn, leads on to larger problems. How mind-stretching, for example, is the question whether the new metropolis, perhaps the largest city of our land, which the Panama Canal is to create, will be Mobile, Galveston, New Orleans, or some new city as yet unnamed!

Nor is it enough that the vocational counselor shall know the general distribution of industries throughout the country and the peculiar situation in her own neighborhood. She must, in addition, understand something of the changes which are under way in both. As new occupations are developed, and old expand to meet new demands, the opportunities for boys and girls are increased both in number and in variety. Every new invention may add another vocation to the long list of possible callings or cancel an old one.

In the two decades, for example, which followed 1870 the openings for nurses multiplied ten times. Operatives in hosiery and knitting mills became thirteen times more numerous. So also, with the development of the street railways, did the demand in that field increase. The number of typists and stenographers, during the same period, expanded seven hundred and twenty-nine times.

Among women workers there are to-day thirty times as many bookkeepers, clerks, and office workers as there were a generation ago, fifty times as many saleswomen, sixty times as many journalists, a hundred times as many packers, shippers, and agents, and no less than two hundred times as many woman lawyers. Not only the present state of a local industry but its tendencies and its probable future should determine a vocational choice.

When all is said, however, "there are only two kinds of people in the world—men and women." No difference of birthplace, and only the more fundamental differences of talent and capacity, commonly influence one's choice of a life task as does the accident of sex.

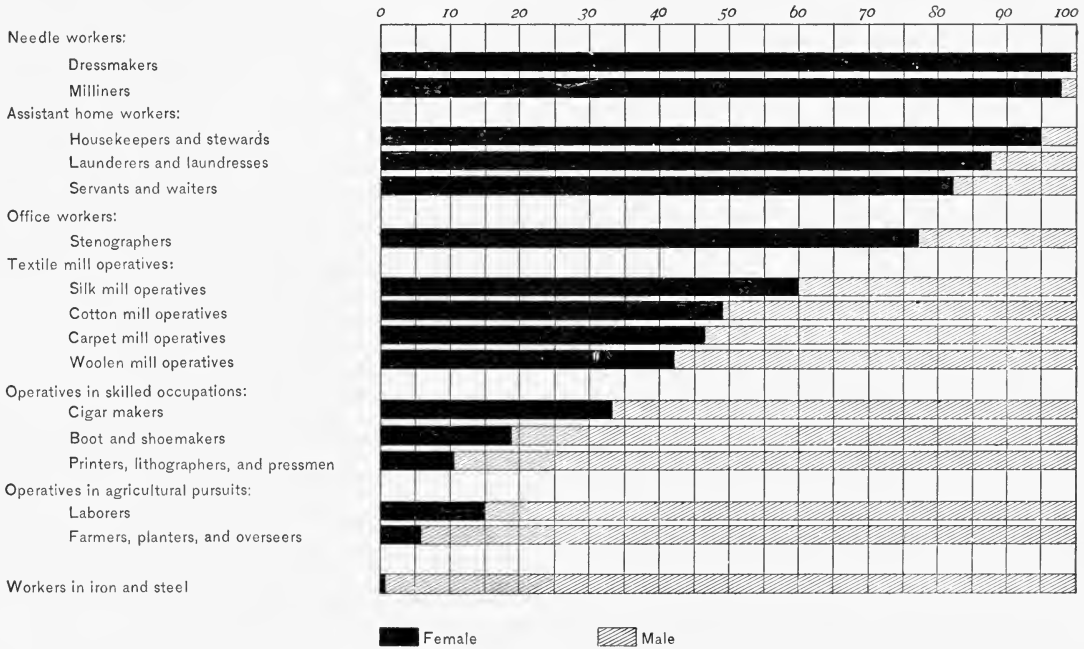
Of the three hundred and three gainful occupations[1] listed in the United States census, women had, twenty years ago, entered all but seven. To-day they have entered all but four. Men only are soldiers, telephone and telegraph linemen, roofers and slaters, and makers of steam boilers; but there are women preachers and women blacksmiths. Evidently the tendency to assimilate the vocations of men and women has about reached its limit!

Practically, however, agriculture, the building trades, iron work, railroading, the care of horses, and certain of the professions are virtually confined to men; while women pretty much monopolize home making, nursing, dressmaking, millinery, house service, stenography, and elementary teaching. Over half the workers in the cotton and silk industries are women, and they outnumber the men in eight prominent occupations in which both take part. In general, the men get the heavy work and that which takes a long apprenticeship, the women the lighter sorts and those which are learned by practice during actual work.

There is some difference between town and country. Fully twice as large a proportion of women enter gainful occupations in cities of over fifty thousand inhabitants as in the smaller cities, the villages, and the country.

More than half the women in the United States work for pay during some period of their lives, and the number tends slightly to increase. In 1880 sixteen in every hundred were at work outside their homes. In 1890 the

[1] See Appendix.



Proportions of men and women in the United States engaged in special occupations

proportion had risen to nineteen. But ten years later it had become only twenty and six-tenths, and there is no evidence that the proportion has increased since then. In fact, in several important industries the number of women workers has of late years notably decreased. At no time, however, have so many as a tenth of those who enter the wage-earning group continued there throughout life.

Apparently, then, the relations of men, women, and work have now virtually completed their adjustment, so that there will probably be little further change, until the next great social upheaval like that which followed the rise of the factory system. The result is one on which society may, on the whole, congratulate itself. As Havelock Ellis says, "The hope of our future civilization lies in the development of equal freedom of both the masculine and the feminine elements in life." That happy consummation, so far as our occupational life is concerned, we seem now to have attained. So far as men and women follow different occupations they do so from individual fitness or preference, not from social pressure. For all practical purposes, between the limits of boiler maker on the one side and nursery governess on the other, either sex is free to do about as it likes.

CHAPTER VIII

The Differences among Occupations

VOCATIONAL guidance means getting a proper job for the youth; and it means also getting a proper youth for the job. Now there are in the United States, according to the census, three hundred and three different kinds of occupation; and there are about two million boys and girls leaving our schools every year to find work of some sort. The teacher knows already the various general types of young people. It is well that she know also the various general types of job.

A blind-alley job, which carries with it no chance for promotion

Beware of the "blind-alley" job. Such pay fairly well at first, sometimes as high as five dollars a week to a youth of sixteen. But they leave him stranded at twenty, with no prospect of promotion to anything better, and with ten dollars a week for his wildest hope during the rest of his days.

The messenger boy is in one of the worst of blind alleys

They pay well at first, because no capable boy or girl can afford to take them at any price.

The words of a "special-delivery" boy tell the sad story:

"I have wasted a lot of time. When I started in I thought it was a fine job, because I only had to work from eight o'clock in the morning to three in the afternoon. I have begun to realize lately that it would have been better to start in as some of my friends did who had to go to work at seven o'clock in the morning. They have good positions now, and I have outgrown my job."—*Vocational Survey of Minneapolis.*

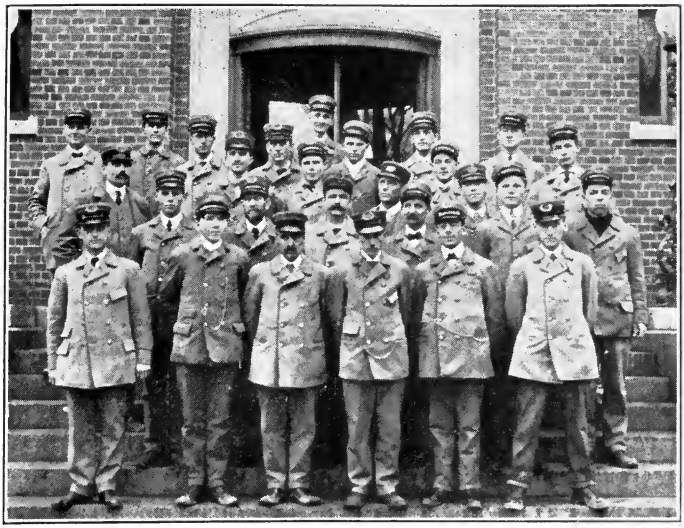
A messenger boy, for example, is in a perfect blind alley. He has learned all that he needs to know when he can find his way around town. After that he learns only vice and dishonesty, and is more likely to retrograde than to advance.

The counter salesman or saleswoman in a department store is likely to be in a blind alley. Exceptional ability, industry, or good fortune does occasionally lift one into the class above, where there is a chance of further promotion. But a majority of persons will not rise above the counter job.

Miss Flexner, in a study of six hundred and three children of known employment, found, among boys, one hundred and eleven errand boys, forty-eight office boys, eighteen messengers, eleven cash boys, and eight others as stock boys, elevator boys, and the like. Among girls, thirty were cash girls, twenty-two were office girls, thirteen were stock girls and the like. Twenty-five, boys and girls together, were packers. In all, one hundred and eighty-six, nearly a third of the whole number, were at work at blind-alley tasks which could lead them nowhere.

The recent British Royal Commission on the Poor Laws has stated this matter with peculiar force: "It is unfortunately only too clear that the mass of unemployment is continually being recruited by a stream of young men from industries which rely upon unskilled boy labor, and turn it adrift at manhood, without any specific industrial qualification, and that it will never be diminished till this stream is arrested."

To be sure, this blind-alley work is necessary. It must be done by somebody. But it should be done by adults who have already proved their fitness for no higher tasks, not by children who may have possibilities. No one condemns the postman. He performs an important service, and receives a reasonable wage. But the messenger or telegraph boy is in one of the worst of all blind alleys. Probably, if the mail business had remained in the hands of private companies, our letters also would be delivered by boys cut off from every chance of



In contrast with the blind-alley job of the messenger boy is the dignified position of the postman

promotion. As it is, the wise youth will keep out of the telegraph service also.

"The allurement of high wages for uninstructive work," says Bloomfield, "is soon understood by many a boy, and his restlessness in those occupations, where often, without any provocation, he throws up his place, is a constant source of vexation and destroys any plan which the employer might have in view for the promotion of his boys. This skipping from job to job can only mean for most boys demoralization. They become vocational hobos.

"The 'dead-end' or 'blind-alley' occupations, with their bait of high initial wages and their destructiveness to any serious life-work motive, are breeding costly social evils.

"Unfortunately, the tendency of the American boy is toward a short cut. He wants immediate returns. He is unwilling to submit to a long period of training for the sake of higher later returns."

Contrasting with this is the "thoroughfare," one is

almost tempted to call it the "state-road," job. It may be a long road, but it is a safe one to travel. This, in general, starts with low pay and "a chance to learn the business." Sometimes, to be sure, the chance is illusive; but, in general, work at which boys are paid poorly and men well is the sort that is worth looking for. Where a boy under twenty and a man over forty are paid the same wage, the boy had better keep out.

The testimony of the boy in the state-road job presents a great contrast to the blind-alley report. A young salesman says:

"My work is so interesting I never look forward to the end of the day or the week. Every day there is something new. I had no idea that there was so much in business when I started. Salesmanship is a fourth profession. You have to learn men so that you can read them as you would a book. I know boys who went to school with me whose only ambition is to hold their jobs. My ambition doesn't stick to holding my job. I want to advance out of it."—*Vocational Survey of Minneapolis.*

Not unlike this distinction between work which pays well at the beginning and that which pays well at the end, is the difference between occupations that offer a few great prizes with many blanks, and occupations which afford the certainty of moderate success. Teaching and the ministry among the professions, for example, bring no such incomes as medicine and, still more, the law. Both, on the other hand, more often guarantee a useful life and a fair return, in striking contrast to the wretched and too often immoral existence of the unsuccessful lawyer or physician. A farmer, reasonably industrious, rarely fails to make some sort of living—and as rarely dies rich. The business man may become wealthy almost over night, and be in the hands of a receiver the next year.

A youth of uncommon promise, therefore, who is likely to go far in any field, may be well advised to enter one of

Courtesy of Carlisle Indian School

Farmers in the making. Carlisle students learning to farm according to scientific principles

the hazardous occupations. He will probably be among the few who arrive. But a youth of more moderate parts will more wisely play for safety. If he is to miss the great prizes anyway, he is better off in a field where there are none.

The same reasoning applies also to those occupations or localities in which conditions have been rigidly standardized, as for example by a labor union, as contrasted with those in which a workman sinks or swims on his own initiative. If his natural gait, on the whole, fits the lockstep of his group, still more if he comes a little short of the standard, then his best chance is in solidarity. But the man who has it in him to travel faster or farther than his mates had better go it alone. A dray horse will not draw his load any faster in company with a racer. It only frets the racer to hold him to the dray-horse pace.

As between work that requires training of a special sort, like teaching in the grades, stenography, or nursing, and one that does not, the odds are always on the former class. The pay may not be so high to start with, because the best prepared beginner may have to master the practical side of the business before he becomes of much use, but the chance of advance is commonly greater. In any case, the necessity for definite preparation acts as a barrier to competition and tends to keep wages up.

On the other hand, there are what one may call general-intelligence and natural-equipment jobs. These, though they demand no specific training, may presuppose a somewhat high quality of mind or body, or, occasionally, certain special gifts. Telephone operators are of this class; so are many retail salesmen, drivers, motormen, conductors, certain sorts of inspectors who come in contact with the influential portion of the public, readers and companions, social secretaries, and professional chaperons.

Policemen, firemen, porters, night watchmen, and the like must have certain rather uncommon physical or moral gifts. Eyesight is often important. Even the ability to endure noise, dust, bad air, long hours, broken sleep, may be a vocational asset. In one way or another, a surprisingly large number of occupations are fenced off by some special native quality, and are made attractive to its possessors merely because the special kind of person is rare.

If, then, any boy or girl appears to have natural quality, yet is cut off by circumstances from special training, he is by no means condemned to the ranks of unskilled labor. Such cases often furnish the most interesting problems which the vocational guide encounters. In none, perhaps, does a successful solution bring a greater reward.

High qualities of mind and body are essentials for the one who aspires to a place on a life-saving crew

One may note parenthetically that while there are certain temperaments to which confining or monotonous work is nothing short of maddening, there are other temperaments to which variety is rather distasteful than otherwise. To perform the same task day after day brings to some men a sense of ease and security; they like the repetition, as some people want to spend all their vacations at the same resort. Professor Münsterburg, in studying this problem, took pains to talk with workmen who were engaged in what seemed to him to be the most uninteresting and monotonous tasks that he could discover, only to find that the workers themselves saw nothing monotonous or uninteresting in their labor. The toil that seems utterly deadening to one type of mind may not seem at all so to the other. There are able men in both groups, and incompetents. The difference is entirely temperamental, but it shuts off each sort of person from any satisfaction in the work of the other. The man who likes selling on the road will hardly make good as a bookkeeper, and the presence or

Iron working calls for abilities higher than those required for the making of a clerk

absence of the *Wanderlust* is quite sufficient basis for the choice of a life work.

When all is said, however, there are few more important differences than that which separates the white-collar-job from the one that is done in overalls.

Unfortunately, on this matter both the tendency of the schools and the pressure of social opinion are precisely on the wrong side. Mechanical ability is really of a higher sort, and less common, than the qualities that go to making a clerk. Furthermore, it is a great deal more valuable to society, since it is always the artisan, the mechanic, the craftsman, who actually makes things. Other persons merely handle them.

Notwithstanding this, everywhere over the country, East and West alike, it is considered more respectable to sell goods than to create them. As one Chicago business man wrote to the committee of the City Club:

"Probably ninety per cent at least of the product of our school system look for clerical positions first, and only go into the other lines of work when forced to do so by necessity. This would be very laudable if they were all fitted for that class of work, but, as a matter of fact, a great many good mechanics are spoiled in making very poor clerks."

At the present time, office and store positions are overcrowded with applicants, but manufacturers report a constant demand for boys with good mechanical ability and training. It would be far better to have the present conditions reversed, for then the boy of least ability would drop naturally, after trial, into the lower position. As things are now, many a boy of good mechanical ability is lured into the world of trade, hides his best talents, and makes society the poorer by the loss of the work which he might have done. It will take much wholesome teaching and much shrewd vocational guidance in this

country before we see the end of the white-collar-job delusion.

Here are the sad words of a parent about his boy, who, with mechanical ability, was directed to a white-collar job.

"His teacher from the grade school advised him to take the commercial course in high school and he did, but he started wrong. He was of a mechanical turn of mind, and so he didn't like it. He has often said since that if he had been studying anything about machines he would have been crazy about school. If the school would keep in closer touch with the boys and girls, it would benefit the school as well as the boys and girls."— *Vocational Survey of Minneapolis.*

It is remarkable, sometimes, how excellent may be the mechanical ability of boys who have little interest or liking for books. I recall one case of a youth in an industrial school who, at the age of twelve, could not read, write, multiply, or divide. But when it came to work on the farm, he would head up more barrels of apples in a forenoon than any grown man on the place. The lad was at once placed in classes in wood turning and iron work, where he did so uncommonly well that his instructor selected him from among thirty classmates for special machine work. So the boy found his place and himself.

Another of my pupils was bright in books but not interested. Naturally, he was most trying as to discipline. Moreover, he cared as little for manual training of the conventional sort as for books. But the moment he stood before a forge, with a chance to pound hot iron, he became another person. In the end he made a first-class blacksmith; but his talent was so highly specialized that it might easily have remained undiscovered.

Unfortunately, the sort of boy who revels in the rattle and the oil and the dirt of machine shop and engine is likely to be just the kind of boy whom a woman will least easily understand. And yet it is precisely that

grimy-handed, muscle-minded sort of man that the industrial world especially wants and is just now especially anxious to pay well. This particular talent is one of the things for which the vocational guide should always be on the watch.

Last of all, but not least important, is the difference between city work and country work, assuming, of course, that the general nature of the employment is to be the same in either.

The odds are always, in a sense, on the side of the city. More children are born in the country than can find a living there, and there must always be some outflow cityward. But the city devours its children. A few especially successful persons turn back to the country to enjoy their wealth and mislead their neighbors concerning urban prizes of life. But, in general, about fifteen per cent of city growth is at the expense of rural communities.

There is no question that a youth with a special vocation for commerce, manufacturing, or the professions will make a more brilliant success in the city than in the country. The last thing to be desired is that all country boys should stick to the farm, regardless of their capacities or inclinations. For the leader in politics, in science, in business, in literature, the city offers a field of action that the country can never even approach. The best town life is richer and more interesting, socially, artistically, educationally, than anything that the village can show.

But how many persons in the city ever had so much as a glimpse of this wider urban life? Not one in ten. Only the favored few can obtain the best that the city offers. Perhaps four in ten, amidst a fierce struggle for existence, have still some part in the things which make city life worth while. The remaining half are condemned

to a sordid monotony of existence of which the country-bred boy or girl can have no conception.

The modern city, steam-heated and brick-paved, has neither climate, nor changing seasons of the year, nor any growing thing. The shifting population makes friendship difficult; there is almost no neighborhood life. The glitter of shop window, the bustle of street, all the thousand and one sights and sounds that allure the occasional visitor, merely irritate or bore those who live day after day amongst them. No small part of the sin of the city has for its only motive the vain attempt to escape the ennui which the country does not know.

Moreover, with the progress of civilization, city life, for the only moderately successful, becomes more and more difficult. Population becomes denser, rents go up, quarters become more crowded. The attractive features of city life increase only by duplication of what was there before; but the stretch of uninteresting streets becomes longer and the slums grow worse. It is still true that "a city is not to live in, but to make money in," and as fast as men make money, they move out into the country.

Crowded quarters and increasing density of population make the streets the children's only playground

Judging corn. The scientific study of agriculture not only tends to improve crops, but makes country life more and more interesting

The country, on the contrary, improves with age. The telephone, the automobile, the better quality of farm horse, spring wagons, the daily mail, the daily newspaper, modern homes, the consolidated school, better roads, improved machinery, men's and women's clubs, increased social and educational advantages of many sorts, even the moving-picture show, are all additions to country life which leave its ancient advantages unalloyed. Country life becomes more interesting every day.

"When in doubt," to adapt Hoyle's old rule, "choose the country." It is all the while improving, rapidly, while the city's gain is slow. Moreover, as one gets older the particular things that the country alone can furnish become doubly attractive. They are the things that last, and give durable satisfaction throughout life. There is a great deal of nonsense talked and written, just now, about "back to the country"— much of it by persons who

know the country only as they see it from a car window on their way between Chicago and Pittsburgh. But when all is said, two boys out of three, born in the country, will do better, taking a lifetime through, to stay where they were born. The other one of the three may be another story.

Increased social and educational opportunities leave the ancient advantages of the country unalloyed

This much, then, by way of general comment on the industrial situation as it relates to boys and girls who are looking forward to places in it. In addition, the vocational guide needs a good deal of detailed information concerning the application of these general principles.

A convenient method of handling the data is this. For each store, factory, mill, and the like, or for each industry which takes boys or girls, prepare an outline statement at least as full as the examples here given. These are, for convenience, for the vicinity of Boston only and for girls, and are based on a study made by the Girls' Trade Educational League.

Errand Girl.

Wages: Three to five dollars; no advancement.
Qualifications: Brightness; carefulness; respectability.
Outlook: None.
Manual skill: None.
Mental development: None.
Dangers: Weariness; monotony; exposure to temptations.
Seasons: Spring; fall.
Hours: Eight to ten a day.

Clothing Industry.

Four to six per cent of girls from fourteen to sixteen years of age.
Work at first: Unskilled; sewing on hooks and eyes and buttons; cutting threads; pressing; folding; packing.
Wages: Three to five dollars.
Advancement: Machine work.
Qualifications: Good eyesight; carefulness; speed; application.
Ultimate wages: Hand work, six to seven dollars; machine work, seven to nine dollars; maximum, ten to eleven dollars.
Manual skill: Machine work calls for intelligent control of hand and finger movement; fine, quick, and accurate.
Mental development: Fair.
Disadvantages: Eye strain; overspeeding; sitting; noise and jar.
Season: Busy, September to December, March to June; slack, January and February, July and August.
Hours: From 8 A.M. to 6 P.M.
Opportunities for training: Boston Trade School; Hebrew Industrial School.

Candy Manufacture.

Sixteen per cent of girls in Boston; age, fourteen to sixteen.
Work: Floor girls; carrying trays; wrapping; packing.
Wages: Three to four and a half dollars; average, five to six dollars; maximum, seven to eight dollars.
Advancement: Floor girl to wrapping, packing, dipping.
Qualifications: Cleanliness; manual dexterity.
Manual skill: Most unskilled; dipping, low-grade skill.
Mental development: None.
Dangers: High temperature in dipping rooms; overindulgence in candy.
Seasons: Busy, September to Christmas, Easter to early summer; dull, January and July.

Hours: Fifty-four; 7.30 or 8 A.M. to 5:30 or 6 P.M.
Opportunities for training: Only factory.

Millinery.
Work: Sewing in linings; making frames; putting on facings.
Wages: Without pay, then three or four dollars; maker, eight to twelve dollars; trimmer, fifteen to twenty-five dollars.
Advancement: Assistant maker; maker; trimmer.
Qualifications: Liking to sew; artistic sense; originality; resourcefulness; dry hands; dexterity; good eyesight; good general education.
Outlook: Good for older girls.
Manual skill: Good.
Mental development: Good.
Disadvantages: Unsteadiness of work; eye strain; sitting; hurried lunch.
Season: Twelve to fourteen weeks in spring and fall.
Hours: Long in busy season.
Opportunities for training: Boston Trade School; High School of Industrial Arts.

Such records, added to and corrected year after year, like the individual records already described, become more and more valuable as time goes on.

Careful and trustworthy surveys of the business and industries of our states and all the larger cities will soon be made for the use of parents and teachers and youths for vocational guidance. These surveys will give accurate information concerning wages, hours of labor, methods of promotion, training required and given, health, and moral conditions of each occupation. But for the present each teacher must make her own local survey as accurately as possible.

CHAPTER IX

Home Making

IT is difficult to realize, in these days when so much is being said and written, by no means always wisely, about the industrial emancipation of women and the extinction of the home, that one half the women in the United States over twenty-five years of age are already wives. Another quarter will marry during the next five years. At thirty-five only one sixth remain unwedded; while by middle life, from eleven twelfths to fifteen sixteenths of those who survive are either wives or widows.

The percentages, taken from the Twelfth Census of the United States, follow:

Ages at which Women Marry

11.2	per	cent,	or	1-9	of	all	women,	marry	before	20
47.3	"	"	"	1-2	"	"	"	"	"	25
72.4	"	"	"	3-4	"	"	"	"	"	30
83.3	"	"	"	5-6	"	"	"	"	"	35
88.8	"	"	"	8-9	"	"	"	"	"	45
92.1	"	"	"	11-12	"	"	"	"	"	55
93.3	"	"	"	14-15	"	"	"	"	"	65
93.8	"	"	"	15-16	"	"	"	"	"	100

Moreover, of every hundred American girls between school and marriage, fifty are either assisting their mothers in their own homes, making homes for their relatives, or working for wages under some other home maker. Even of the fifty that remain, who at first glance might be counted as being outside the home, more than thirty are living under their parents' roofs or in the homes of relatives.

In other words, of all American girls above school age, half have some important part in home making, while

two thirds of the remainder are living in homes in which they have a direct personal interest. At any one time, only an average of seven women in every one hundred over sixteen years of age are wholly clear of domestic life, while so rapid is the transfer of these to homes of their own that virtually one half of the women workers of the country remain under twenty-five years of age.

A partial home maker

For the purposes of vocational advice it is convenient to separate the great mass of womankind which is concerned with home making into three groups. These are: 1. Home makers in the stricter sense, who give all their time and energy to their special task. This group will include many paid housekeepers. 2. Partial home makers, who are heads of households but at the same time work for wages outside their homes. 3. Assistant home makers, who, not the heads of households, are workers in the home either as members of the family or as hired servants. A few of this group, however, do hardly more than "live at home."

Of the first class there are, generally speaking, about eighteen million in the United States, while virtually all women who live long enough sooner or later enter this

group. No other occupational division, save only that of the men who take up farming, at all approaches this in numbers. No other makes so large a contribution to civilization or is so essential to the well-being of the state. Few, on the whole, require as hard labor.

Partial home makers number less than two million. The group includes a small but highly valuable body of women who after they have provided fully for the welfare of their homes have still time, energy, and talent left over for outside service. The author of *Uncle Tom's Cabin* is the best-known example of this type. Few persons realize how many writers, artists, musicians, lecturers, and other professional women of the day are also competent and successful housekeepers, who take more pride and satisfaction in their households than in their public careers. It is highly desirable, on all accounts, that this class of partial home makers should be encouraged. For girls of moderate special talents and considerable general efficiency the arrangement is a peculiarly happy one.

The other, and far larger, group of partial home makers is much less fortunate. This is made up of women who from necessity are doing two persons' work at once — caring for a home and providing for it. Sometime in the near future, no doubt, all our states will care adequately for this class, as several already do. In the meantime, since no woman enters it of her own volition, it lies beyond the concern of the vocational guide.

Assistant home makers, other than servants on wages, number slightly more than five million, of whom nearly one million are divorced women and widows. Four million are likely to be influenced by vocational advice.

This brings us to one of the most trying of all social or vocational problems, the question of paid household service. About one American family in twenty keeps

a servant; and of these, two thirds are either foreign-born or of foreign-born parentage, slightly more than a fifth are negroes, and only the remaining eighth of the whole are native-born whites.

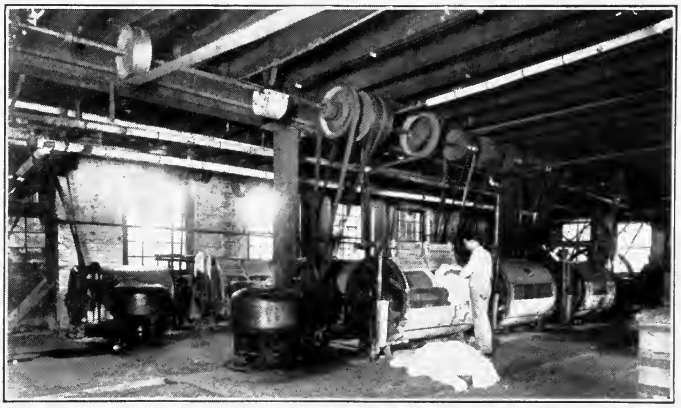
As things are now, domestic service, in most parts of the country, is not to be recommended for any self-respecting girl. The hours are long, the duties are uncertain, the entire relation, in most cases, is feudal and undemocratic. Over large portions of the country a housemaid loses caste and is virtually cut off from marrying as well as she might have done in another vocation.

There are, however, marked differences in local conditions; while almost everywhere, in the larger establishments, servants are decently treated and well paid. No small portion of the snobbery and hardship which the household assistant encounters is at the hands of mistresses who are themselves lacking in brains and character. Conditions, moreover, tend to improve decidedly, while the growing practice of having housework done by persons who come in for their work and then go home, tends to assimilate household to factory standards. Meanwhile, modern house planning, together with power-driven labor-saving apparatus of all sorts, is both making housework easier and necessitating a higher quality of service, with correspondingly higher pay. One thing with another, it is difficult to lay down any general principles, and each special situation will have to be decided on its merit.

Virtually all women, we have seen, will at some time in their lives either make homes for themselves or else take a hand with helping other women make theirs, while at least half will do both. The chance, therefore, that any individual schoolgirl will follow home making as her chief vocation in life is distinctly greater than that any schoolboy

of corresponding age will follow the particular career on which he has set his mind. This is the one great central fact which confronts the vocational guide who deals with girls.

Nor is this great fact one that the progress of time can ever alter. The normal, average women, for whom



A steam laundry. Power-driven labor-saving apparatus lessens the housewife's labor

domestic life seems naturally and without argument the most interesting and the most rewarding of all vocations, are the ones who marry. Theirs are the daughters who, both by inheritance and by example, follow in their mothers' way. The five per cent or less of females in each generation whose home-making instincts are imperfect, in general fail to marry or to bear children, and do not transmit their defect to anybody. We are not reckoning with another small group who fail to marry for other reasons.

The great force of natural selection is, therefore, always on the side of the home-making type. Moreover, the greater the industrial freedom given to women, the more efficiently does this selective process work. The fewer

Courtesy of Superintendent of Schools, Boston

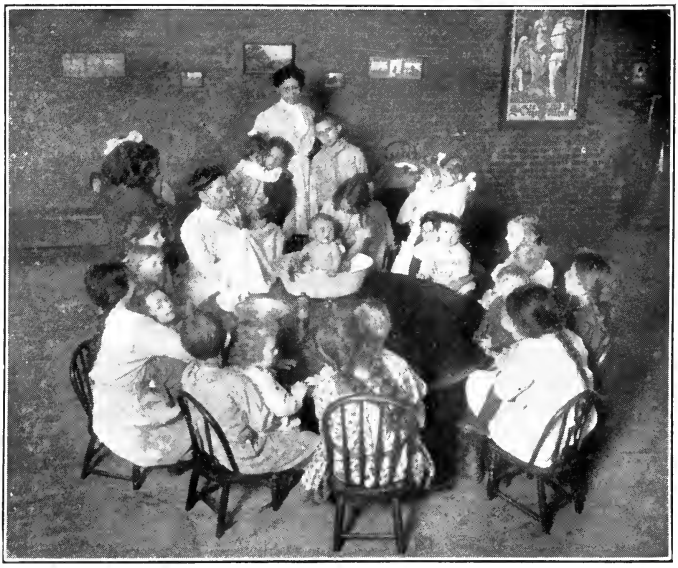
A class in cooking in the Continuation School, Boston. The average woman finds domestic life the most interesting and the most rewarding of all vocations

the women who are pushed into home making, the more "pure bred" becomes the race of those who are drawn.

It is interesting to note that while various social prophets are proclaiming a state of society in which the home has disappeared, and all mankind are fed in eating houses and lodged in caravansaries, while their children are brought up by strangers and by machinery, the actual tendency of things is in precisely the opposite direction. Whatever is being lectured and written about, what is actually being built is the compact, well-planned, single-family, servantless dwelling where even the egg beater is motor driven and home making becomes a work of art. The home has, indeed been a little slow in its response to modern demands; but having once started, it comes with a rush!

This being the situation, there is nothing to be done but to look the facts of life squarely in the face and prepare every girl for the vocation which she is almost certain to enter. Every girl should know, in a practical way, how to cook and serve food, to wash and iron, to mend, to clean, to sew; she should know something of nursing and the care of children, and something of the arts that go to create that home atmosphere which makes the home and the lodging house as wide asunder as the poles. All this, fortunately, is already being done in the best modern public schools.

The course of study used in Colebrook Academy in New Hampshire, shown on the following page, may be suggestive and helpful to the teacher if she has not a textbook on domestic science in her library.



Teaching "little mothers" to care for the baby

Elementary Sewing.[1]

1. All cutting and stitching involved in sewing simple articles for dress and household, including the making of such articles as jabots, sewing bags, towels, aprons, doilies, handkerchiefs, kimonos; darning, mending, etc.
2. Sewing clothing cut by competent fitter.
3. Elementary machine sewing.

Dressmaking, Millinery, and Designing.

1. Designing, cutting, and fitting of clothing.
2. Purpose and requirements of clothing; materials; selection of materials.
3. Instruction and practice in drafting, including the making of drawers, shirtwaists, skirt patterns, etc.
4. Making gingham dress from pattern.
5. Material used for hats.
6. Combination of colors and materials.
7. Relation of face to shape of hat.
8. Plates and drawings.
9. Designing of hat for pupil.
10. Selecting material and making a hat.

Elementary Cooking.

1. Management of coal, wood, and oil ranges.
2. Care of utensils, sink, and other apparatus.
3. Preparation and cooking of vegetables and cereals.
4. Use and cooking of eggs and milk.
5. Preparation of cheap cuts of meat.
6. Different methods of preparation of fish.
7. Batters and doughs, and preparation of muffins, popovers, bread, and similar articles.
8. Preparation of simple desserts, such as bread pudding, lemon jelly, tapioca cream, etc.
9. Preparation of simple menus.
10. Preparation and serving of simple dinners, including instruction in table setting, serving, etc.

The rural teacher in a school where nearly all her pupils bring their lunches can teach many of the essential things in this course on cooking by a shrewd use of the lunch

[1] These courses of study in Colebrook Academy, New Hampshire, are taken from *The Readjustment of a Rural High School to the Needs of a Community*, by H. A. Brown, United States Bureau of Education. *Bulletin 1912*, No. 20.

hour. A good warm lunch prepared by the older girls with the aid of the mothers in the community will help solve the difficulties and problems of the noon hour.

It will improve the afternoon session, and both teacher and pupils will be happier and live longer. Cooking, sewing, and good manners can be taught with less energy than is commonly used in keeping order.

Household sanitation and personal hygiene are also well provided for, and something is already being done with social training. To all these, however, should be added the vocational motive. The girl, like the boy, should always understand the relation of her school task to her life work.

Much more than this might well be done. "The purse strings of the American people are held by the women," and "What we buy, we make." The spender controls the industrial situation, absolutely. She determines what shall be made, and under what conditions. The sweat shop exists only that prices for her may be low. The product of our industries is cheap and trashy, or well made and beautiful, as the purchaser demands. Every girl, therefore, ought to be taught to buy wisely and to understand the far-reaching industrial and social effects of her selection.

Quite as much ought every girl to be instructed concerning the significance of the family and its place in the state, and concerning the social customs and moral standards of the community which, in these days, are determined largely by women. Most of all, perhaps, does the happiness of each woman, the character of her home, her influence in the community, the ultimate value of the work that she does in the world, depend on the sort of man she marries. It was the opinion of Darwin that the whole course of human evolution has been determined by

woman's choice of a mate; while many of his disciples go so far as to maintain that "conjugal selection" is the only biologic force which, at the present day, has any appreciable influence for human progress. Surely, then, a "eugenic conscience" is one of the things that every prospective home maker ought to possess.

The interests of small girls naturally center about home making

Does all this appear a large program? Let us then reflect that the major portion of the detailed instruction is already being given in our most progressive schools. The thing most needed now is to focus the child's interest, to make her think about home making as an immediate personal problem, so that she will keep her eyes open and notice successful and happy homes as she notices striking hats and coats.

In all parts of our country there is a tendency to call attention to the unhappy homes. Divorces and family quarrels make prominent headlines for the daily papers

and comedy and tragedy for the moving-picture shows. So much also is being said about the white-slave traffic that some persons are inclined to think that all men are bad and few women virtuous. This is directly contrary to the facts. Such persons overlook entirely the great army of daily toilers who make up the great mass of mankind. In the ranks of honest toil, virtue is the rule and its absence the exception. It is safe to say that the great majority of men in all classes remain absolutely true and loyal to their homes.

A few teachers have come from broken and unhappy homes, where their own lives have been saddened and prejudiced. Such a teacher must remember that she is dealing with children, many of whom come from good homes. She can, by a careless word or act, poison a child's thought toward home making. This is criminal. She can, by reverence, increase the child's interest and respect for home making. This is the greatest service a teacher can undertake.

In spite of all the faults and limitations of parents, it is unquestionably true that the home is the most powerful educational institution in society. All the great fundamental virtues — reverence, honesty, sympathy, purity, and modesty — are learned at home and almost never outside of it. In the exceptional cases it will often be discovered that the beginnings of virtue were made at home, and the erring youth was brought back to a mother's or father's teaching. At least three fourths of the education of men, and a still larger part of the education of women, is received in the homes of their childhood and parenthood. The teacher is an assistant to the parent.

If certain elements appear too advanced for the elementary schools, let us reflect that we are already

teaching, from the lowest grades up, the most difficult, obscure, complicated, and generally unexplored of all sciences, namely human physiology. Compared to instruction in "the scientific effects of alcohol on the human system," a suggestion on the unwisdom of marrying a drinking man is simplicity itself.

Nursing is a vocation which contributes directly to increase the efficiency of the home maker that is to be

The great difficulty with the vocational guidance of girls, however, is this, that they must so often be prepared for two occupations in order to be ready for one. All girls must be trained for home making, if the American home is to continue to do its high work. At the same time, at least half of the girls will have to be trained for something else. Each woman is likely to enter at least two vocations.

Practically, the matter works itself out in one of two ways. Either the girl occupies herself between school and marriage with some vocation which requires little preliminary training before earning power begins,—and this, as we have seen, tends to become the prevailing type of the occupations reserved for women,—or else she

takes up some vocation which directly prepares her for the home, and for which, oftentimes, her training for home making directly prepares her.

How many of these latter there are one does not realize until he actually counts them.

WOMEN IN WORK RELATED TO THE HOME

	Number	Per cent
1. Domestic workers closely related to home making	1,885,478	8.1
2. Agriculture. Majority are members of family or owners of farms	770,055	3.3
3. Workers with needle and sewing machines, about	700,000	3.1
4. Professional	430,576	1.9
		16.3

WOMEN IN WORK UNRELATED TO THE HOME

	Number	Per cent
5. Workers in mills and factories	about 350,000	1.5
6. Office workers	about 300,000	1.2
7. Saleswomen and business	about 250,000	1
8. Miscellaneous		.6
1900 Census		4.3

Only one woman worker in five is doing something quite unrelated to the home. But training in cooking, sewing, dressmaking, millinery, decorating, nursing, teaching,—one need not go on with the list,—all contribute directly to increase the efficiency of the home maker that is to be.

Girls of the second group, who enter store, or office, or factory before they take up their final vocation, commonly gain far more than they lose. They get standards of order and efficiency, a knowledge of the world and of the value of money, a sense of independence and of self-reliance that, in the long run, are worth a good deal more than the special technique of housekeeping which they may miss.

In some instances they get a wider choice of husbands,—a highly important matter from any point of view.

The whole vocational problem, with its ideal solution as it concerns the girl who, between school and marriage, is not especially needed in her own home, is well summed up in two quotations, the first from Professor Earl Barnes:

"During the period of transition from schools to their own family life, the girls might well give a half-dozen years to work in factories and stores, where the conditions should be as good and as well guarded as in our best school buildings—in factories, in a word, where the employers would be willing that their own daughters should work."

The second quotation is by Mrs. Sally Joy White:

"They, the women wage earners, do not take up the work with the earnestness that men do; it is more often than not a temporary makeshift, a something that must be done,—in order to be independent,—to bridge over a certain time of waiting, usually the time that lapses between school and marriage. It is not regarded as a permanent thing, and the girl very openly says that she accepts a position of the kind only until such time as the coveted position of wife is open to her. Now in one way that is all right and natural. There is no one in the list of employments, in all that comes to a woman's hand to do, so important or beautiful as that of making the home. But it must come naturally and it must not be too openly anticipated. The work meanwhile must be just as faithfully done, as much heart and brain put into it, as if one expected to do it forever. It makes the way easier for other women who have to follow in some footpath of toil, and it adds to the self-respect of the worker as well as to her value to her employers. So while I would not have you look lightly upon the most royal gift that can come to your life, neither would I have you stand in an attitude of waiting expectantly, but go on in a dignified fashion, rounding out your life in every way, until the great glory of perfected womanhood comes into your life. Then take it, feeling that it is yours by divine right."

As for the girl who becomes an assistant home maker to her mother or to some other woman before she goes to a home of her own, she commonly starts her married life

A position in the "Off the Street Club Band" will enlarge the social group and the experiences of the child

with a better mastery of her trade than does the girl who first works outside.

Part of the trouble with the girl who is needed in her parents' home is that she is not enough needed. Her people cannot manage without her; and yet, too commonly, she does not have enough to do or enough responsibility to make her work really interesting. The obvious remedies are partial work outside, study, the trying out of possible vocations; best of all, perhaps, definite preparation and practice that look toward the home. The girl at home needs a good avocation in music, art, church work, if for no other purpose than to increase her social group and social experiences. The girl with an avocation will be of more value as an assistant home maker. Moreover, it would be, in many ways, an advantage if the

Home making is an art to be picked up by observation and learned by doing

daughter at home could be paid wages like any other worker, as later, when a wife, she should have her determined and unquestioned share in the family income.

After all, home making is a peculiar vocation. Success in it depends on character, brains, standards, experience of the world, sheer womanliness, more than on any specific piece of information which one has or lacks. The home maker, unlike the toiler for wages, picks up her load gradually, first a husband, then one child, then another; a little house to learn in, and then a larger one. Of all occupations, home making is the most "feminine," in the sense that it is most an art to be picked up by observation and learned by doing rather than a trade that has to be mastered, once for all, in advance.

Naturally, the discussion of home making has focused on the feminine side, but a good home is always the

product of the sympathetic coöperation of man and woman. Men come nearest to the group of "partial home makers" who by choice have two vocations. All of the arguments in regard to home planning and decoration, household sanitation, and the training of children apply equally well to the boy. In addition, there should be a training for a boy in the spirit of thoughtfulness and chivalry toward women which allows for no exceptions.

One cannot help feeling that this whole problem of the vocational guidance of girls is at the present time very far from anything like a final solution, and that, for various reasons, no group of persons is on the whole better fitted to deal with certain aspects of the matter than are the grade teachers of the country. Evidently, in the end, the problem will have to be settled by woman, not by man, and in accordance with feminine, not masculine, standards and ideals. Most teachers are young enough to feel the spirit of the times, detached enough to see the problem as a whole, while at the same time, far more than any other equally large group of wage earners, they are in close association with the normal, wholesome, average community life. The social worker is too much concerned with the unsuccessful and "submerged"; the lecturer or writer too much out of contact with everyday reality. Neither so much as approaches the grade teacher in her influence over the young. Moreover, the teacher herself has, in general, had a nearly ideal preparation for home making—a vocation, be it observed, to which she by no means infrequently turns. In short, the girl who fits herself for teaching, keeps school, let us say, five years, and then marries, becoming herself the type of a successful life, treading the way that she points out.

CHAPTER X

Agriculture

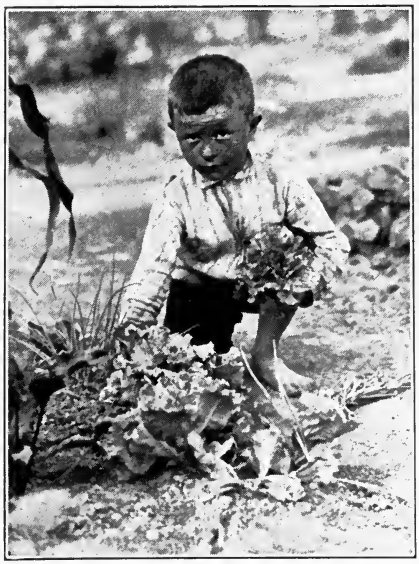
NEXT to home making, both in its importance to society and in the number of persons whose vocation it is, stands agriculture. Over seventy boys in one hundred in country districts take up farming, and, naturally, an equal proportion of girls become farmers' wives. An appreciable number of women, also, support themselves wholly or in part by the lighter sorts of agricultural work, such as poultry raising, market gardening, and the growing of small fruits. Besides these, there is a vast mass of unskilled seasonal farm labor which does not count as any part of the permanent country population.

In other words, there are at the present time in the United States six million, four hundred thousand resident farmers on their own or rented land. These are assisted by three million members of their families and three million transient laborers.

The number of farm workers in the country increases with the growth of the general population; but the proportion tends distinctly to decrease. Thirty years ago, over forty-four Americans in a hundred got their living out of the soil. To-day, the number lies between thirty-four and thirty-five. At least nine boys in each hundred, therefore, who a generation ago would have stuck to the farm, are now leaving it for the city.

Indeed, since the beginning of the present century the country population of Indiana, Illinois, and Iowa has actually decreased. Three of our richest states, capable

of supporting thirty million people in comfort, are actually going backwards. The land is still cultivated, but in larger units and with an increasing proportion of tenants, both for cash and on shares. The proportion of tenancy is, moreover, highest on the best soil. A certain amount of rentable land is, to be sure, highly desirable, since it enables ambitious young men to get their start in life; but too much of it introduces serious problems which bear directly on vocational guidance. Tenancy, as a rule, means robbing the soil, and therefore a decreasing return for labor. The tenant moves often, and so fails to become a citizen with local interests. Himself lacking the sense of ownership, he lacks also one of the strongest motives for training his children to respect farm work. On the other hand, the feudal landlord moves into town, fails to become a citizen in his new environment, and degenerates. Both by precept and by example, he educates his children away from the farm. The result of the present system is an attitude of mind toward agriculture that may affect unfavorably half the children of a community.



One of the possible thirty-five boys who will get a living out of the soil

The reason for this decrease is not far to seek. The demand of man for food remains a nearly constant quantity. With the progress of society he tends to increase greatly the variety of his food, but not its total quantity. In fact, with increased knowledge of nutritive values and increased facilities for avoiding waste, the total quantity of food needed for a given population may actually be lessened. Meanwhile, as better methods of agriculture increase the yield per acre and new and better machinery adds to the efficiency of labor, fewer persons do the same work. Roughly speaking, the time required for handling an acre of potatoes, from plowing to harvest, has been reduced from thirty-eight hours to nine, of oats from sixty-six hours to seven, of hay from twenty-one hours to four, while the acre of wheat that once required sixty-one hours of hand labor is now cared for by machinery in three. All of these various causes, working together, tend to shift labor from agriculture to manufacturing, where, of course, the demand for more product is unlimited. Inevitably, therefore, the drift of population is from farm to city.

Consequently, most of the talk which we hear nowadays about getting back to the farm is utterly vain. It is true that we can so increase the rewards and the attractiveness of farm life that a better quality of boys and girls will stay there. Exactly this, as a matter of fact, is now being done. But there is no possible way to move permanently any group of workers from city to country unless their city work comes with them. To attempt this is merely to drive an equal number of country dwellers cityward. All this the vocational adviser in the country must understand and face.

But there is farming and farming! One does not farm in the abstract; he grows and markets certain definite crops. There is, then, always the local problem. All

the various kinds of agriculture, moreover, constitute separate vocations in the abilities they require, the training they demand, and the rewards they offer.

For small farms, for example, with intensive work in fruits, vegetables, poultry, or dairy products, there must be, along with other things, a kind of puttering love for that particular thing. As one poultryman has put it, "To be successful with hens, a person must have feathers." There is hen sense as well as horse sense, and certain individuals seem to have an innate understanding of particular living things. This, certainly, is one of the things to be watched for in the young.

Raising fruit on the small farm requires a kind of puttering love for that particular thing

On the other hand, for large-scale farming there is required virtually the same business sense and managerial ability as for any other form of production. Sound judgment is, of course, the first prerequisite of any successful business. Besides this, the large-scale farmer must have a knowledge of men and skill in handling them. This means sympathy, tact, a sense of justice, and firmness of character, all of them qualities which may show early in school life,

especially on the playground. He should have a level-headed business sagacity which keeps expenses below income and therefore shows a profit; a progressiveness balanced by a conservative economy which leads him to provide fertilizers and machinery and yet leaves the ledger right side up. Nearly all farmers, also, in these days of machinery, need to have fair mechanical ability in order to select their apparatus with discretion and care for it in use. Few, probably, do really well without uncommon powers of observation. Scholarship, moreover, counts for the modern farmer, who must read up on market conditions, soils, seeds, varieties of animals and plants, methods of handling animal and plant diseases, and a host of other matters of "book learning." Evidently, there are few occupations that call for a better balanced or more all-round ability.

Courtesy of Booker T. Washington

A study of the cow. Keen powers of observation are essential to all successful farming

Lured by specious advertisements, the casual farm laborer follows the crops across the country

How far removed from either of these types is the casual farm laborer! He spends his winters in the slums of a city. In the growing season, lured by specious advertisements or by the voice of spring, he follows the crops across the country, beating his way on freight trains and lodging in out-buildings and barns. Twelve thousand of his like have been stranded at one time in a single city of the Northwest, waiting for the grain harvest, a moral and social danger to the community and a degenerating influence on one another. It would be far better if, as in the old days, all farm labor could be done by resident citizens, sufficiently numerous to handle the rush season, and provided with by-employments for slack times.

We have already noted that the farmer, though he works long and hard with his hands, belongs in his social

affiliations with the business and professional castes rather than with the so-called "laboring classes." He does not, like the mechanic, learn his trade once for all and then go on repeating himself for the rest of his days. Rather is he, on the contrary, like the surgeon, explorer, engineer, surveyor, geologist, sculptor, essentially a brain worker despite strong muscles and skillful hands. From the vocational point of view it would be quite possible to treat agriculture simply as one form of business were it not for certain peculiar educational and social problems which it presents.

How multiform the problem is, socially as well as vocationally, will appear from a glance at the conditions of production of a few great agricultural staples. In the corn country there is incessant labor from early spring until the plowing, planting, and cultivating are over. Then comes a rest period from "laying by" until harvesting in the late fall. Here comes opportunity for visiting and for the Chautauqua course. Winter also is a leisurely time; while throughout the year a moderate amount of attention to cattle, hogs, and chickens adds variety to the day's work. Farms are usually of medium size, and most of the labor is done by machinery. The result is a community of high general intelligence and, in many sections, an interesting social life.

In the small-grain region, on the other hand, while there is the same alternation of periods of leisure and of high activity, with so much high-skilled mechanical labor as to make wheat growing almost a mechanical trade, the farms are in general large. The result is that in spite of the high level of intelligence in these communities there is limited coöperation and a notable dearth of social life, especially for the farmers' wives.

A poultry farm or a market garden near one of the great

cities of the Northeast presents still other contrasts. The proprietor of either may dwell amidst "commuters," and be essentially a city man. One cannot say that he has a vocation for "agriculture." He must specify what sort and where.

One point, nevertheless, nearly all types of farming have in common — the alternation of seasons of light work with toil that runs to twelve and fifteen hours a day. The fitness of any youth for farm life depends in part on his ability to utilize the one and to endure the other.

Many types of agriculture, moreover, do involve a good deal of isolation and circumscription of life. Some characters mellow under this; more, probably, harden and narrow. Such purely temperamental differences, also, may need to be considered.

It should not be forgotten that many of the elements which go to make farming unattractive as a vocation are largely within the control of the farmers themselves. Any one who chooses agriculture as a career can, if he will, make the life appreciably more desirable than it is.

Consider, for example, the single element of coöperation. There are at the present time, in this country, a thousand coöperative selling agencies and four times as many societies that buy. There are eighteen hundred grain elevators owned in common, and twenty-four hundred cheese factories and creameries. Eighty-five thousand agricultural coöperative societies have together no fewer than three million members. Quite aside from the economic importance of these bodies, they are powerful social agencies which develop the farmer both as a citizen and as a man. No other movement, in fact, is so much needed at the present time or gives greater promise of financial and moral returns.

Denmark, at the close of the Franco-Prussian War, was

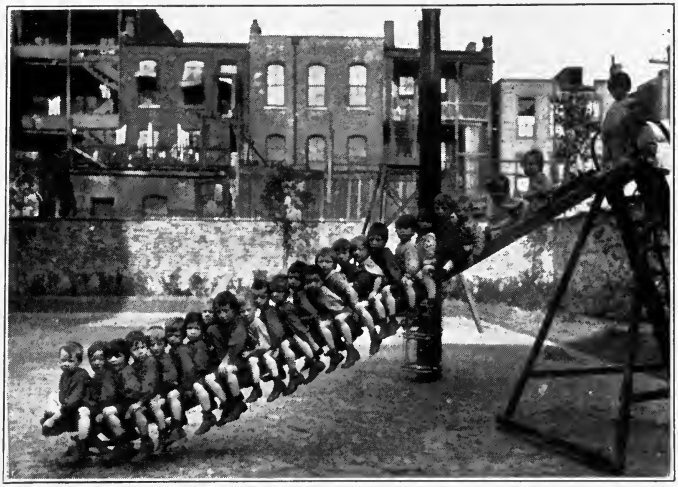
nearly ruined. To-day it is one of the richest countries in the world—it has been judged to be absolutely the richest in Europe in the general average prosperity of its citizens. Coöperation, more than any other one thing, has made the difference. The same coöperation in buying, and in marketing and financing crops, should work equal wonders in this country.

The teacher can render great service by starting and supporting various kinds of social and coöperative activities. These movements must be closely tied to the economic life of the community,—better soil, better crops, and better homes. Corn, cotton, potato, and fruit-growing clubs can be started for the boys; sewing and cooking clubs for the girls; Hesperia associations[1] for parents and teachers; permanent institutions and granges for old and young. When a social interest is once started in a community it is sure to spread. Miss Jessie Field of Page County, Iowa, has shown the value of this kind of work in connection with her district schools. Nebraska has made it a state-wide movement of its department of education, and many of the agricultural colleges employ an expert on boys' and girls' clubs. In several states, especially in the South, independent associations are doing the same kind of work.

Closely related to the social activities is the play spirit. One of the greatest needs of normal life is more play. The isolation and monotonous routine of farm life have driven the more social youths to the cities and established in the country a deep-seated prejudice against play. In this field the teacher must often take the initiative, and must work with great tact, for the school trustees and the parents may be out of sympathy with play.

"It must be borne in mind," says Professor Myron T.

[1] A local movement in Michigan for the upbuilding of a rural community.



The neighborhood playground in the city furnishes opportunities for coöperative play which the isolation of farm life has denied country children

Scudder, in the tenth Year Book of the National Society for the Study of Education, "that play in the country is not so much to promote health as to develop the higher social interests, to introduce another powerful centripetal factor into country life which will tend to counteract the expulsive features which have been so actively depopulating our country districts. The country child does not play enough. His repertoire of games is surprisingly small and inadequate. If he would play more he would love the country better, see more beauty in it, feel the isolation less."

Worth noting in this relation are the recommendations of the Country Life Commission. These are, in brief, the development of a coöperative spirit, especially in the home; simplification, in many cases, of the diet; convenient and sanitary houses, with running water; more

mechanical aids; better means of communication, such as roads, telephones, and reading circles; good and convenient gardens; better developed women's organizations. Farm life, not as it is but as it would be with these and other improvements, is the picture to be held before the country boys and girls.

One singular advantage over all other vocational guides

Mechanical aids make easier the work of the farmer's wife

belongs to the teacher in the country school—she can make the dominant local industry an important part of her class work.

Paradoxically enough, the school garden, with its early radishes and lettuce for the home table and its asters and marigolds for transplantation to the back yard, is a city idea. So, too, is the device of correlating this fundamental interest of all children with the teaching of more bookish subjects.

Unfortunately, it is only too true, as Sir Horace Plunkett has remarked, that "the education given to country children has been invented for them in the city, and it not

only bears no relation to the life they are to lead, but actually attracts them toward a town career." Following, however, is an idea peculiarly adapted to country use, and of immense educational value. "The cultivation of plants," says Professor Hodge in his well-known *Nature Study and Life*, "has indicated and developed elements of character fundamental to civilized life. Willingness to work for daily bread, intelligent provision for the future, courage to fight for home, love of country, are a few among the virtues attained. When we consider its universal and fundamental character, the omission of soil lore from a system of education for the young is suggestive of a lapse into barbarism."

Our school systems change slowly, but it is within the power of every teacher in a country school, man or woman, to correlate agriculture and farm work with almost every school study. The nature study of the primary grades can be given a strong agricultural flavor, and used to excite a lively and lifelong interest in common everyday phenomena. The rural teacher is especially fortunate in the large use she can make of outdoor work. At various seasons of the year she can plan for regular trips to study soils, seeds, pests, plants, trees, rocks, moisture, birds, making all these as definite a part of the school work as language or arithmetic. Outdoor nature is the best of all fields for training the powers of observation, while few are the faculties of more value in the truest education. The work may be made very foolish as well as very wise. At its best, it combines more helpful forces than almost any other school activity.

The love of children for farming, or their antipathy toward it, is often founded long before the child is able to reason concerning his likes and dislikes. Interest in agriculture, therefore, should be awakened young, through

a little garden where there are quick returns, a sense of ownership, and direct relation between the soil and the child's own digestive system. Here also is another field for coöperation between school and home.

Many farmers who have no flower or melon garden for the children, or a garden to please mother by supplying fresh vegetables for the table, expect their boys to become interested later in acres of wheat or corn. Children are not interested in general farming or in general principles about farming, but can be interested in concrete work in flowers, fruits, and vegetables. The concrete, practical methods must be followed by every successful counselor.

Naturally, it will commonly be quite impracticable for

Nature's out-of-doors is the best of all fields for training the powers of observation

An interest in horticulture may be aroused by the growing of bulbs and plants in school

the teacher to have summer gardens at the schoolhouse, because of the long summer vacation, but she can do some very creditable spring work from March to May in cold frames and hotbeds. By planting lettuce, radishes, asters, and tomatoes, interesting results can be obtained before the end of the spring term. The radishes and lettuce can be carried to home tables before the first of May, and the asters and tomato plants can be used for sets in the home gardens. The interest started at school will be carried home.

The teacher may find many valuable suggestions in the course of study in elementary agriculture used in Colebrook Academy in New Hampshire. She can obtain from her own state department and agricultural college, and from the United States Department of Agriculture, bulletins which will give detailed information and very

practical suggestions on every topic in this course. In nearly every farming community there are persons who have attended the agricultural college or have thoroughly educated themselves in the problems of farm life. It is wise to secure the assistance of these persons.

Agronomy.

1. Elements of plant life: Study of seed, root, stem, leaf, reproduction.
2. Soils: Origin, kinds, uses, soil, water, plant food, care and improvement.
3. Seed selection and testing: Judging, germinating, analyzing.
4. Fertilizers and manures: Composition, value, relations to soils and crops, lime.
5. Insects: Kinds, harm, benefit, life habits.
6. Farm crops: Kinds, cultivation, uses, care.
7. General handling of field crops.
8. Experimental work in greenhouses.
9. Practical work in school gardens.

Horticulture.

1. Review of general principles of plant life, soils, fertilizers, and cultivation.
2. Greenhouses, hotbeds, and cold frames; Principles, construction, and use.
3. Care of plants under glass: Forcing and hardening.
4. More special study of (*a*) vegetable growing; (*b*) fruit growing; (*c*) flower growing.

Animal Husbandry and Dairying.

1. Types and kinds of farm animals: Horses, cattle, sheep, swine, poultry.
2. Principles and practice of breeding: Origin, improvement, care of farm animals and plants.
3. Feeds and feeding: Why, what, and how I feed.
4. Structure and function of the animal body; systems of the body and care.
5. Animal diseases, disinfection, and general sanitation; prevention and cure.
6. Observing and scoring herds in community.
7. Milk: Kinds, care, uses, composition.
8. The Babcock Test: Theory and practice, use.

9. Essentials in good milk production: Cleanliness, care.
10. Market milk and cream: Kinds, uses, preparation, care.
11. Butter making.

Farm Carpentry.

1. Construction and proper use of carpenter tools.
2. Reading and drawing blueprints.
3. Plan for each article before construction is begun.
4. Study of building plans and construction, with practice in estimating and figuring the cost.
5. Mechanical drawing.
6. Construction of wooden articles needed on farm and for home and school use.
7. Repairs to school building.
8. Practical work in construction and repairing.

A course in manual training will help a teacher to understand and rightly use tools, to make drawing plans, and to construct many articles of practical use for home and school. Such training will also help her to understand and appreciate the mechanical type of boy.

Farm Blacksmithing.

1. Proper use and construction of blacksmith tools.
2. Mechanical drawing continued.
3. Study of iron and steel manufacture in an elementary way.
4. Hardening and tempering.
5. Study of typical farm implements, machinery, and, so far as possible, construction and repair of same.
6. Constant practical work at the bench and forge on useful articles of iron construction.

This kind of work may be quite impossible in a one-room school, but in a village the teacher might take her classes to machine and blacksmith shops and possibly get a local blacksmith to teach a small class of boys in the evenings.

Forestry.

1. Study of New Hampshire forest types: Life history, associates, enemies of characteristic tree in each type. (Use name of your state.)
2. Forest seeding and planting.
3. Management of the farm forest; the wood supply.

4. Management of government forests.
5. Conservative lumbering.
6. Relation to stream flow and general rural conditions.
7. Practical field observation and lectures by experienced foresters and lumbermen.

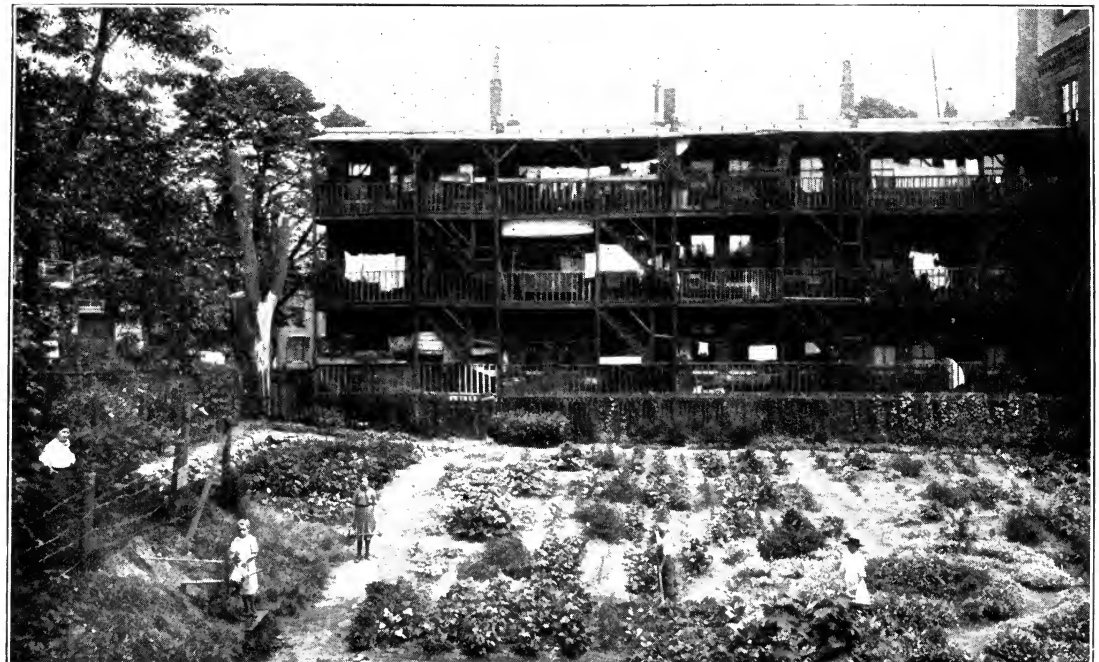
To the above I should like to add: 8. Prevention of forest fires.

Road Building.

1. Essentials of a good road: Grades, solidity, water shedding characteristics.
2. Road material and principles of construction.
3. Dirt, gravel, macadam, and telford roads.
4. Bridges, grades, cuts, and fills.
5. Projecting, laying out, and figuring cost of roads in the vicinity.
6. Field work in observation of construction work in state highways in the vicinity.

Road building is a vital economic and social problem. It is intensely interesting to boys. The teacher, after instructing her pupils on these problems, may be able to take her classes to a near-by piece of construction or get an interested farmer to take a class of boys in his automobile to a more distant piece of road construction. Plan beforehand for the engineer or boss to explain the principles and processes to the class. "The country school," says Miss Carney, "should do its part in instituting a good roads sentiment among the children and people of its community."

After all, agricultural education, unlike most other occupational training, must be lifelong. It begins with the child's first interest in growing things; it continues through home and school gardening and the doing of "chores." The technical training of the agricultural college leads on through the Grange, the farmer's institute, the trade paper, the reading of books. Here lies the unique opportunity of the vocational counselor who is also teacher in a country school. More than all others,



In the city the child's interest in growing things finds an outlet in the school or neighborhood garden

she takes her client young, and from the beginning is at once teacher and guide.

Hardly less unique is the opportunity of the country teacher for trying out her pupils in other and more special ways. The city child has his school garden, and trades plants and seeds with his fellows. This should be encouraged—and watched for signs of business capacity. But the country boy has also, or ought to have, his colts and calves, the girl her chickens and eggs. With the friendly relation between teacher and parent, which is so much more easily established in the country than in the city, it is a simple matter to detect and encourage any special business or mechanical ability.

A teacher of agriculture in a city school in Iowa recently said to me:

"I did not know my boys until we began our garden work. Early in the summer the boys began to buy and sell their corn. I stopped it, but I soon saw my mistake, and after a certain time barter was again allowed. In the free practical work of the gardens, with their buying and selling, the boys who can do business and those who will always have to be guided reveal themselves. The business men of our city took advantage of the garden work and wanted me to let them know of the successful buyers."

Closely related to the whole problem of the vocational guidance of country boys and girls is the question of consolidated rural schools.

In Wisconsin, for example, nearly eight hundred schools have only fifteen or twenty pupils each; more than five hundred have between ten and fifteen; no fewer than two hundred and seventy have an attendance below ten; six thousand consist of one department only. In Indiana a thousand schools fail to exceed fifteen boys and girls, while twice that number fall short of twenty. Illinois, at last accounts, had one thousand, seven hundred and fifty-one institutions numbering fifteen pupils or less.

Ninety-one and a half per cent of the rural schools of North Dakota are handling no more than a score of pupils each. Half the children in the whole United States, and ninety-five per cent of those in the rural districts, are in schools of this type.

On the educational disadvantages of this system, and on its social influence, we need not here dwell. From the point of view of vocational education and vocational guidance, the evil results are serious. The growing child needs many playfellows of his own age. Through their aid he learns the social virtues and the great art of getting on with other people. More than that, he finds his social level; and if he has any capacity for leadership the give and take of school life, and especially of the group games, will develop it.

Now capacity for leadership, as we have already noted and as we shall see more fully hereafter, is one of the great elements of vocational success, and one of the things for which every vocational guide must be continually on the watch. It shows on the playground, on the ball field, in the various spontaneous groups which young people form,— but it cannot show in isolation. A school that does not number near the hundred is by that very fact unable to offer its pupils one of the greatest of educational and vocational opportunities.

Moreover, as we have already noted, the time when the youth most easily learns the social virtues is during the adolescent years, between fourteen and eighteen. But, unfortunately, country boys and girls at this period are usually out of school, and living an isolated and unsocial life on the farms. City youth, on the other hand, are at this age in school, factory, or shop, in close association with their fellows. The consolidated schools have proved beyond dispute that not only can they employ teachers,

both men and women, of more maturity and experience than the district schools, but they can in addition hold their pupils later, and carry them farther along in their social development. The result is precisely that social training, that education in solidarity and coöperation, which the country especially needs.

The matter is well summed up by Davenport in these words:

"The consolidated country school is the only plan proposed that will keep intact the country home, educate the child within the environment in which he is growing up, and make him the intellectual equal of his city cousin. Any plan short of this is not only unjust to the individual, but it is disastrous to country life."

Consolidation is no longer a debatable question in some parts of our country.

"The most rapid and remarkable progress in the history of consolidation has occurred in the last decade in Indiana, where 1,600 small district schools have been abandoned and supplanted by about 600 consolidated schools."[1]

In consolidation of schools, Ohio stands second with 350, Louisiana third with 250, Minnesota has 130, Washington 120, Virginia 100, Oklahoma 86, Kansas 75, and Idaho 20.

When from these somewhat general considerations we turn to remunerations which farming offers to those who follow it, it becomes difficult to make definite statements. Men have taken up land and paid for it out of two seasons' crops; and men have toiled for years and seen all their savings disappear in two summers' droughts. It is notorious that a succession of abundant harvests in America coinciding with short crops abroad has transferred farmers, literally by the thousand, from penury to affluence. Many comfortable fortunes have been made simply by holding down land till a city picked it

[1]Carney's *Country Life and the Country School*, p. 160.

Courtesy of Superintendent of Schools, Boston

A neighborhood playground. Here the boy with capacity for leadership, one of the great elements for vocational success, comes to the front

up. All this is the speculative side of farming. On the whole, in this respect farming is about on a level with other forms of business.

Considered as a problem of income, returns are in general more certain in agriculture than in either trade or mechanical work. The farmer can usually put in his time remuneratively. At least he is safe from being laid off completely in bad times, or ordered out on a sympathetic strike. His money income is often small, but his

Courtesy of Amherst (Mass.) Agricultural College

Ability to judge cattle is one of the many requisites of the all-round man on the farm

total returns, considered from the standpoint of surplus above expense, is probably higher than for any industrial class that uses its muscles. The members of no group with anything like the same cash income are so well able to save for a rainy day.

High among the rewards of farming must be placed the possibility of possessing one's own home. The desire for ownership is deep-seated in us all; the gratification of few desires affords more lasting satisfaction. Twice as many persons own their dwellings in the country as in the city. This consideration will, perhaps, not appeal as strongly to the young as it should; but to the more experienced, few considerations have more weight.

Of immaterial rewards, by no means least is the great interest and variety of farm work as compared with most other forms of labor. In spite of immemorial humor, the intelligent farmer is vastly more an all-round man than his city cousin. The variety of doings is immensely greater in the more specialized industries; but the number of things that any one man does is immensely less. There are fewer kinds of farmer than of traders and mechanics; but each individual farmer is more different kinds of a man.

In certain ways, too, in spite of tradition, the farmer has more social advantages than other men who work equally hard. As does no other toiler, he has his definite seasons of light work to which he can look forward with certainty, and for which he may plan. Teachers also are sure of getting away in the summer for recreation or for special educational work; and for short conventions at other times; but aside from them, the Chautauqua course, the summer or winter institute, and the special short session of the agricultural college virtually are the monopoly of farmers and their families. One is able to get away from plow and reaper in a way that is not possible from bench or desk.

Best of all, as compared with other workers, is the farmer's home life. Agriculture is not merely a vocation for the breadwinner; it is mode of existence for the entire family. Mother and children are partners with the father in his work and in his success. Family life is more unified and home means more in the country. Whatever may be said of the farmer's money returns, only a very small number of especially successful business and professional men secure greater opportunities for happiness.

For very many reasons, therefore, the vocational problem of agriculture is peculiarly complex. It includes

Poultry raising makes mother and children partners with the father in his work and in his success

not merely the simple occupation, but the whole matter of country living, of district education, and of rural society. No aspect of vocational guidance calls for more insight or more wisdom. The more the teacher is interested in farm life, in the possibilities of moral development, in the functions of social and coöperative institutions, and the more she appreciates the great significance of agriculture in the national welfare, the better teacher and counselor she will be.

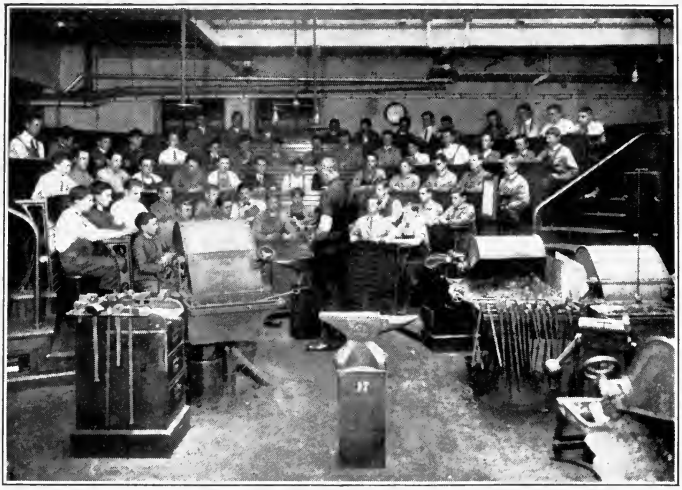
CHAPTER XI

The Mechanic Arts

NEXT in importance to the women who make homes and the men who aid living things to grow, come those persons, both men and women, who alter the character of materials. At one extreme are the skilled craftsmen —stair builders, cabinet makers, smiths of various sorts—whose work, at its best, shades off into the fine arts. At the other are the merely deft persons who tend looms or feed sheets of paper into a press. All have this in common, that they employ not crude strength alone, but some sleight of hand as well; and they use a tool or machine to make some object different from what it was before they touched it.

Socially, they are distributed through the first, second, and third of the five great castes into which economists are wont to divide society. Psychologically, they are of the group of muscle-minded folk or mixed muscle and other types. In a somewhat vague sense they are the group which especially uses its hands, as the laborer uses his back or the clerk his wits.

Numbers are somewhat hard to estimate, for the reason that the group shades off in several directions, with no very precise limits. Nine million for the United States is practically accurate, of whom a fifth are women and four fifths men, the proportion being just about the same as for gainful occupations as a whole. Included with workers in the mechanic arts are something less than twelve hundred thousand persons, for the most part men, who are engaged in mining. Over one third of these are



Courtesy of Superintendent of Schools, Boston

Smithing is one of the mechanic arts employing some sleight of hand as well as strength

in Pennsylvania alone, while another third are distributed throughout the northeast Central States.

To a noteworthy extent, manufacturing in its various forms is an affair of the city, as agriculture is of the country. Of every hundred men workers who dwell in cities of over twenty-five thousand inhabitants, more than thirty-six follow the former vocation, and less than two the latter. Local variation is however very great, especially in the kind of industry. Thus, for example, three in every one hundred shop workers in Boston are employed in making shoes; but in Brockton, only twenty miles away, the number jumps to eighty. In Philadelphia, in spite of the remarkable diversity of its industries, four factory hands in one hundred work on rugs. In New York City, which is highly specialized, twenty in one hundred make garments. Even a state, though it has

comparatively few factories, may have a remarkable number of a single sort, as witness the small shoe factories scattered through New Hampshire. For this reason, the thorough study of local conditions by the vocational guide is especially imperative in this field.

The teacher can obtain this practical knowledge if she will make a careful study of the mills and factories where any kind of mechanical work is done. She can make a study of working conditions, as suggested at the close of Chapter VIII, or make a more detailed study of the shop or factory by the following plan, worked over into a form to meet the local conditions.

OUTLINE FOR STUDYING A FACTORY, MILL, OR OTHER MECHANICAL INDUSTRY

I. *Description.*
   1. Name.
   2. Location.
   3. Departments.

II. *Physical Conditions.*
   1. Factory plan.
   2. Health conditions: Ventilation, dust, moisture, toilet rooms.
   3. Dangerous kinds of work: Accidents, monotonous, nerve-racking.
   4. Lunch room: Equipment, service.

III. *Employees.*
   1. Number: Maximum, minimum, average.
   2. Same for men, for women, for boys, for girls.
   3. Number on day wages, weekly wages, salary, piecework.

IV. *Occupations of Employees.*
   1. For men, for women, for boys, for girls.
   2. Unskilled, low-skilled, high-skilled.
   3. Office workers, foremen, officials.

V. *Hours of Work.*
   1. Daily, night work, Sunday work, holiday work.
   2. Lunch periods.
   3. Vacations.
   4. Irregularity of employment.

VI. *Wages.*
1. For men, women, boys, girls.
2. For apprentices and journeymen.
3. For unskilled, low-skilled, high-skilled.
4. For office workers, foremen, proprietor, officials.
5. For overtime pay, for piecework.

VII. *General.*
1. How is help secured?
2. Training required before entrance.
3. Questions asked applicant, teacher, or former employer.
4. Training in shop and methods of promotion.
5. Spirit of workers; contentment, loyalty.
6. Attitude of officials and foremen toward men, and vice versa.
7. Nationality of employees.
8. Home and social conditions of employees.
9. The pension system, how controlled; contribution of firm and employees; accident, sick and death benefits.
10. Comments of proprietors, foremen, and laborers.
11. Future of the industry.
12. Number of similar establishments in the state and in the United States.
13. Capital invested.
14. Value of stock.
15. Value of product.
16. Wages paid.
17. Average earnings of salaried employees.
18. Average earnings of weekly employees.

The answers to the last six questions can be obtained in the United States Census.

If the teacher cannot obtain the local conditions by visiting the factories, she can instead visit the parents of her school children in their homes and ask them many of these questions. A conversation of this sort makes one of the best occasions for the teacher to become acquainted with parents.

Numbers in this group tend continually to grow. People will always want larger houses, better furniture, newer clothes. Manufactured articles of all sorts, from

fountain pens to automobiles, are the only good things of life for which the public demand is limited only by the general wealth. The modern man eats hardly more than the wild Indian who preceded him. He ranges over far less land. But think how many more things he owns! Civilization expands most conspicuously on the manufacturing side.

On the other hand, the factories seem not to be absorbing any greater proportion of women. In fact, in the great cotton industry the ratio of women has been steadily falling. The growing demand for female workers is, as we shall see, in another field, so that while a man looking forward to factory or other mechanical work can pretty certainly count on an increased demand for his services, a woman cannot.

The group covers a wide range of industries; and these for convenience fall naturally into three somewhat ill-defined subdivisions according to the amount of manual skill required.

At the bottom come the so-called "unskilled industries," not always absolutely unskilled in the sense that a day laborer is unskilled, but rather in the sense that they presuppose only a little natural dexterity without any particular training. Here belong such occupations as mere tending machines as distinguished from running them, where, for example, the operator simply pushes paper into an envelope apparatus or tin plates into a can cutter, and the machine furnishes the brains. Packing candy or crackers into boxes, or dipping chocolate, is also of this sort. Such work is quite within the range of a fairly high-grade imbecile, and yet a surprisingly large number of persons are not equal to it because their fingers are all thumbs. Nearly a third of the factory workers, a full third of the persons who make cotton cloth, jewelry,

hats, and garments for women, sixty per cent of those who work in packing houses, and ninety per cent of those who manufacture confectionery and wall paper are of this grade.[1]

Wages are low, while the chance of promotion is almost nothing. The concern of the vocational guide is to keep out of this group everybody who can by any possibility get into anything higher. Especially for the young should the "No Admission" on the factory door be taken literally.

To the second class belong the low-skilled laborers. An experienced foreman once offered this distinction between no skill and low skill among his operatives; the former ask for "a job," the latter specify what it is they can do. The low-skilled workman does mix some brains with his work, does exercise some judgment and care, and take some responsibility. In general, work is cleaner and done under better conditions, children under sixteen are not wanted, and there is a reasonable chance of promotion to higher and higher work within the group.

The packing houses and the manufactories of men's clothing have about a quarter of their help of this low-skilled grade. Among workmen on pianos and jewelry, in the building trades, and in the iron and steel industry, the proportion rises to about one half. Among makers of electrical and automatic machines, automobiles, farm implements, and wagons it becomes three quarters. In general, throughout the industrial world, about four persons in ten belong in this grade, with three in ten in each of the groups above and below.

Here is, one need not say, entirely worthy work at fair

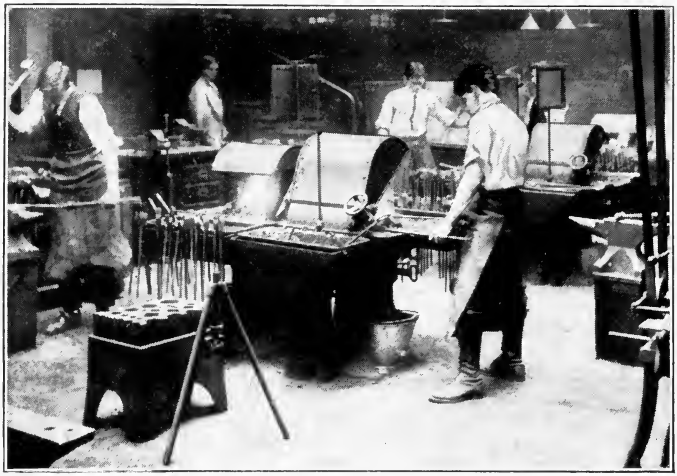
[1] As a guide to a study of industries and the social conditions of the workers in these industries, read Miss Elizabeth Beardsley Butler's thorough study of Pittsburgh, *Women and the Trades*, published by the Carnegie Foundation.

Courtesy of Girls' Trade School, Boston

Straw-hat making is one of the high-skilled industries, with high pay but short seasons

pay. All youths who show a leaning toward mechanical vocations should be headed at least as far up in the scale as this. The lower group will be amply recruited from those who fail to attain the middle rank.

Within the group itself, however, and even after the boy or girl is actually at work in shop or factory, there is still both need and opportunity for vocational guidance. Curiously enough, it often transpires that an individual worker who does not succeed at all well with one machine will nevertheless do good work with another, which off-hand one would say would demand exactly the same qualities. The machines have each a certain characteristic rhythm, into which one worker falls naturally, while another is continually getting out of step. Some factories, therefore, deliberately plan to shift their workers about until each finds himself at that particular machine



Courtesy of "The Christian Science Monitor"

The foundryman belongs to the group of high-skilled mechanical workers

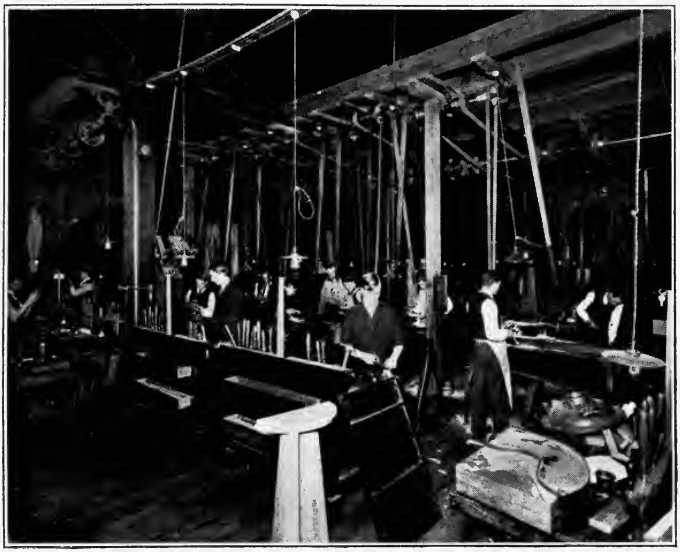
whose pace and swing fits his own, and this point is one which should always be kept in mind.

To the group of high-skilled mechanical workers belong carpenters, plumbers, blacksmiths, tailors, machinists, glass workers, printers, binders, engravers, lithographers, stonecutters, engineers, milliners, and dressmakers — in short, all the descendants of the old craftsmen and guild members of the Middle Ages, together with their modern equivalents. This group was the special sphere of the old-fashioned trades union of two generations ago, and is still the seat of most of the permanent and responsible labor organizations.

It is in all ways, in fact, the aristocracy of the manual laboring class. Its members are highly trained, either in trade schools or by long apprenticeship. Training, as in the professions, continues after earning begins, through a change of jobs and a shifting from one shop

to another. Indeed, an ambitious youth will not infrequently throw up a position in which he is doing well for the sake of a chance to learn some new or less familiar process — a state of affairs that would hardly occur in either of the lower groups. Special sureness of eye and hand, together with much familiarity with a somewhat wide range of tools and methods, is characteristic of the group.

An ancient tradition places the blacksmith at the head of this division, on the ground that he, more than all other workers, makes his own tools. Ellis's study of the distribution of British genius would put the carpenters highest, on the ground that more sons of carpenters than of other mechanics have risen to eminence. Therefore,



From the Rindge Manual Training School, Cambridge, Mass.

Sureness of eye and hand and familiarity with a wide range of tools and methods distinguish the aristocracy of the manual laboring classes

he argues after the strictly modern manner, carpenters must themselves be abler than other manual workers.

Be this as it may, out of this group of high-skilled manual toilers come the great proportion of workingmen's families who conspicuously better themselves and of

Courtesy of Booker T. Washington

Tinsmithing at Tuskegee. Every boy should have a trying-out course in some industrial work under a good instructor

individuals who rise much above their starting points. Incomes in this class are often higher than among the lower ranks of brain workers. On both these accounts, the vocational guide will need to be especially on the alert for artisans' children of exceptional promise.

The demand for qualified workers in this group is never filled. It is always the one partial vacuum in the industrial world, the one vocation to be chosen in case of doubt. For this reason every boy and girl should have

some adequate trying-out by a course of manual and industrial work under a good instructor. If he shows fair ability, this should be encouraged in all ways, as by additional shop work and by reading and trips to see industrial processes at first hand. If the youth responds to this treatment, he has probably found his vocation. At the worst, he will only drop down to the middle class of manual workers.

If, on the other hand, he cannot saw to a line or drive a nail — and some cannot, with any teaching — the fact soon transpires and the case is closed on that side. In general, the decision between mechanical and non-mechanical vocations is one that may come early.

The present course of study in our schools, especially the arithmetic, geography, history, and literary work, can be based largely upon the problems of agriculture, commerce, and manufacturing. In our cities the more of an industrial and commercial flavor is given to school work in the upper grammar grades, the more interesting it will be to the pupils and at the same time give general vocational information. Suggestions for giving to the present school studies an industrial setting can be found in the following course of geography-history used in the Cleveland Elementary Industrial School.

I. *Iron and Steel Industry.*

The age of steel.

1. Iron ore; its value.
2. Distribution of ore in Lake Superior region.
3. Ease in mining with labor-saving devices; speed of steam shovel.
4. Transportation of ore from mines to boat; speed in loading an 8,000-ton ore boat; unloading.
5. Blast furnace. Description. Contents of furnace.
6. Connellsville coke. One hundred and forty-mile journey to Cleveland.
7. Making of pig iron.

8. Making of wrought iron: its uses.
9. Steel: Bessemer converter.
10. Steel has revolutionized farming, war, transportation. Influence on railroads, bridges, buildings.
11. Location of iron and steel centers.

II. *Lumbering.*

Wood.

1. Structure: Pith; wood; bark.
   (*a*) Pith: Center, soft, valueless.
   (*b*) Wood: Sapwood, heartwood, value of each.
   (c) Grain: Edges of annual rings. Woods of beautiful grains — specimens. Value of grain in beauty and durability.
2. Value of forests: (*a*) Construction. (*b*) Buildings; furniture. (*c*) Pavements, fences. (*d*) Fuel; pitch; tar; turpentine. (*e*) Paper, hemlock bark, maple sugar, nuts, etc.
3. Lumbering: (*a*) The logging camp; time of going into woods; why? (*b*) Building of camp; life. (*c*) Control of streams. (*d*) Cutting, brushing, felling, branding. (*e*) Log-skidding; the ice road. (*f*) Banking ground and edge of river bank.
4. Log driving: (*a*) Time of year and conditions. (*b*) Hardship of rivermen's lives and dangers. (*c*) Control of streams, dams, and log chutes. (*d*) A log jam and its dangers. (*e*) Sorting and rafting — the logs at the "boom." (*f*) Rafting logs to the sawmill.

Manufacture.

(*a*) Making logs into lumber. Sawmill; location and kind of power.

(*b*) Location of boom for holding logs: Saw room and its machinery; saw carriage; kinds of saws — circular, band, gang; dry kiln; planing mill.

(*c*) The sawing operation: Carrying logs into mill from boom. Sawyers and saw carriage which holds log and carries it against rapidly moving saw. Drying and dressing. Sawdust and use. Piling in great stacks on docks or in yards.

Location of Forest Regions.

1. Pineries: (*a*) Maine, New Hampshire, Vermont. (*b*) Northern Minnesota, northern Wisconsin, northern Michigan.

(*c*) Western Washington, western Oregon, western California (especially redwoods); specimens.

2. Hardwoods: (*a*) Ohio valley; locate by states; conditions at present in Ohio, Indiana, Kentucky. (*b*) States producing most of the hardwoods to-day; our outlook in this field. (*c*) Great value; industries dependent on it.
3. Yellow pines and cypress.
   (*a*) Yellow pines: Value and uses of wood. Commercial use of sap. Ports of export—Charleston, Savannah.
   (*b*) Cypress: Method of lumbering in swamps; value; where wood is in contact with water. States producing: Louisiana, Mississippi, Alabama, Florida, Virginia, North and South Carolina.

Marketing of Lumber.

1. Lake boats—Duluth to Cleveland; trace journey.
2. Minneapolis—in heart of region. Center of raw material. Easy, cheap transportation. Waterfalls cheap power. Distributing center.
3. Lake ports engaged in shipping lumber.

Mapwork: Western ports; kinds of lumber; markets.
Forest reserves: Conservation of forests. Object of forest reserves. Work of government.

III. *Agriculture.*

Wheat (Correlate with breadmaking)

1. Widespread use in ancient and modern times—staff of life.
2. Varieties of wheat, and states raising it, and use: Winter wheat, spring wheat, durum.
3. Preparation of soil: Plowing—steam plow, sulky plow, gang plow; harrowing, planting—pictures of machinery.
4. Harvesting: Time and condition of grain. Old implements: Cradle, reap hook. To-day: Self-binder, steam header and thresher.
5. Threshing. Flail, modern machine. Life on farm during threshing season.
6. Marketing grain.
   (*a*) Hauling to grain elevators.
   (*b*) Grain-collecting cities of the West and immense elevators.
   (*c*) Movement of wheat by rail: Northern Pacific, Great Northern, Chicago, Milwaukee & Puget Sound.

(*d*) Cities engaged in handling of wheat: Minneapolis as a center, Chicago, Milwaukee, St. Louis, San Francisco, Seattle, Tacoma.

7. Manufacture.

Flour: Old methods of grinding, present patent roller process. A great flour mill — process explained with specimens. Flour production—cities.

IV. *History.*

1. History of Cleveland.
2. Civics—the government of Cleveland in detail.
   (*a*) Charter.
   (*b*) Council and mayor, with respective duties.
   (*c*) The departments.
      (1) Public service, with its subdivisions and work of each.
      (2) Public safety.
3. In study of industries, historical background introduced, for instance:
   (*a*) In commerce of Great Lakes—the history of the Great Lakes, beginning with French explorations.
   (*b*) In study of railroads—the history of the Union and Central Pacific R. R., with the difficulties of the undertaking.
   (*c*) In lumbering, in the hardwood forests—Daniel Boone and the early pioneers in Ohio Valley.

Next to picking the boys and girls for mechanical work, the great problem of the vocational guide is to get them in line of training for their highest efficiency. For this purpose it is most important to secure the advice of an expert who knows the mechanical industries from the inside, or of a professional vocational counselor, who can act as a go-between among employers, teachers, parents, and young people, and adjust the boy to his job. This is already done admirably for delinquent boys.

The classification of workers in Chicago according to skill may give to the teacher some surprises and practical data for guidance in industrial studies.

REPORT OF CITY CLUB OF CHICAGO

Men Employees by Industries in Chicago

OCCUPATION	PER CENT			WAGES	
	High Skilled	Low Skilled	Unskilled	High Skilled	Low Skilled
1. Tailors to the trade	97	3	0	$19.00-$23.00	$ 8.00-$10.00
2. Job and newspaper printing	75	16	9	20.00- 22.50	10.00- 15.00
3. Wholesale manufacture of men's clothing	74	26	0	18.00- 20.00	9.00-.....
4. Factory millinery	70	8	22	18.00- 22.00	15.00-.....
5. Men's neckwear, shirts, hosiery, underwear	58	11	31	15.00- 18.00	8.00- 12.00
6. Engraving, electrotyping, embossing, lithographing	57	21	22	20.00- 28.00	8.50- 15.00
7. Pianos and other musical instruments	53	42	5	18.00- 19.00	10.50- 13.00
8. General construction of buildings, electric power plants, docks	51	49	0	27.00- 30.00	13.00- 17.00
9. Hats, gloves, fur goods	49	45	6	15.00- 30.00	8.00- 12.00
10. Bridges and other steel structural work	48	22	30	16.20- 27.50	10.80- 11.40
11. Embroidery, children's dresses and dry goods specialties	46	26	27	15.00- 18.00	8.00- 10.00
12. Excavating, wrecking, roofing	37	41	22	23.50-.....	12.00- 17.00
13. Cloaks, suits, waists	34	38	28	20.00- 26.00	10.00- 15.00
14. Machine and engine construction, car building, foundry steel works, ornamental iron	33	21	46	17.00- 20.00	12.00- 18.00
15. Jewelry manufacturing	27	27	46	20.00- 25.00	8.00- 10.00
16. Electrical apparatus, gas and electrical fixtures, automatic machines	25	74	1	17.00- 22.00	10.00- 13.00
17. Packing houses and allied industries	17	25	58	15.00- 25.00	10.50- 12.50
18. Automobiles and accessories, wagons, and farm implements	16	78	6	16.50- 21.00	10.50- 15.00
19. Paper boxes	8	35	57	15.00- 21.00	9.00- 15.00
All men studied	30	40	30	15.00- 30.00	8.00- 18.00

REPORT OF CITY CLUB OF CHICAGO

Women Employees by Industries in Chicago

OCCUPATION	PER CENT			WAGES	
	High Skilled	Low Skilled	Unskilled	High Skilled	Low Skilled
1. Tailors to the trade	97	3	0	$17.00-$19.00	$ 7.00-$ 9.00
2. Wholesale manufacturers of mens' clothing	55	45	0	15.00- 18.00	9.00-.....
3. Job and newspaper printing	55	36	9	12.00- 18.00	6.00- 10.00
4. Men's neckwear, shirts, hosiery and underwear	51	4	45	10.50- 14.00	6.00- 8.00
5. Hats, gloves, fur goods	42	45	13	10.00- 12.00	5.00- 9.00
6. Embroidery, children's dresses, dry goods specialties	35	65	0	8.00- 12.00	5.00- 9.00
7. Pianos and other musical instruments	31	64	5	10.00-.....	5.50-.....
8. Factory millinery	18	8	74	15.00- 20.00	6.00- 15.00
9. Cloaks, suits, waists	14	41	45	14.00- 24.00	10.00-.....
10. Automobiles and accessories, wagons and farm implements	12	88	0	8.00- 10.00	7.25- 8.50
11. Packing houses and allied industries	12	38	50	7.50- 14.00	6.50- 12.00
12. Electrical apparatus, gas and electric fixtures, automatic machines	10	90	0	9.00- 11.00	6.00- 9.00
13. Engraving, electrotyping, embossing, lithographing	7	46	48	.....	6.00- 9.00
14. Paper boxes	5	79	16	9.00- 14.00	6.00- 9.00
15. Jewelry manufacturing	1	97	2	.....	6.00- 7.00
All women studied	16	45	39	.....	.....

As things are now, much sound mechanical ability is lost to the world. In fact, it is notorious that in many different industries it is the immigrants trained in foreign lands, where the long apprenticeship is in vogue, who fill the best positions. This certainly is one of the things they manage better abroad.

One trouble with us in this country is the pernicious

Courtesy of the Carlisle Indian School

A class in harness making in the Carlisle Indian School. The literary and industrial curricula are here carefully correlated to make the students self-supporting

activity of some private "commercial colleges." These are accustomed to purchasing lists of names of pupils in the upper grammar grades, and then sending representatives to the parents of the children with every specious argument in favor of a clerical life. Even when these schools do not make promises which, in the nature of things, they cannot by any possibility fulfill, they help to foster the prevailing wrong impression concerning the "white-collar job." In general, parental inclination is already too strong in this direction. The trade schools are either endowed or else they are public, not private, institutions, which do not bid for pupils, and only a small group of correspondence schools are on the side of the sounder advice. Here, then, is a field in which the conscientious vocational guide will need often to do battle.

In this respect, the problem is, therefore, not merely vocational and social, but economic as well. Here is one of the fields in which the vocational guide becomes a constructive social force. A writer of a generation ago, Edward Eggleston, has put the general case as well as it is ever likely to be stated:

"The trouble comes mostly from a mistaken notion of respectability. There is, even in our democratic country, a feeling that certain callings are in some way more respectable than others; and unmanly as this feeling is, it misleads thousands to their ruin. In so far as it refers to the learned professions, we may readily understand the prejudice, as the successful pursuit of these of necessity implies the possession of both intellectual strength and culture; but prejudice does not confine itself to drawing the line between those professions which presuppose culture and those which do not. The idea seems a not uncommon one that it is in some way more respectable to sell goods over a counter than to follow a mechanical pursuit; or in general lines, that those vocations which may be followed in broadcloth are more dignified than those which may not. There must be salesmen in dry goods stores, of course, but the demand is always greater for skilled labor, and the supply is nearly

always in the inverse ratio. The mechanic has a technical culture—a skill gained by years of patient study—while the other has not; and the possession of such a culture is a just ground for honest pride, as well as a sure guaranty against poverty. In short, while honest work is honorable and dignified, the skill of the mechanic, which is in itself culture, is a worthy subject of pride; and other things being equal, the mechanic is the superior in fact. . . . He can do a higher kind of work; and he is a more thoroughly educated man in his fustian than is his fellow in broadcloth, who with no greater intellectual or educational endowments, lacks his technical knowledge.

"To a young man with capital in reserve, or with its equivalent in influence, or still better with extraordinary capacity, a clerkship may offer a reasonable prospect of ultimate advancement; but without one or another of these conditions, the chances are more than a thousand to one that he will never succeed in making more than a bare support for himself, while the overcrowded conditions of the ranks in which he stands makes his position a precarious one always. The mechanic, on the other hand, brings a definite skill to bear on the problem of money making. Only those who are similarly skilled can compete with him for employment. His skill is a positive capital, and his work is always productive. There are few brilliant opportunities open to him, though there are in reality quite as many as there are to the salesman or clerk; but he knows definitely how to do something that other men must have done, and which they cannot do for themselves, and if he be sober and industrious he is always sure of a support, and with a wise economy he may almost certainly accumulate a comfortable surplus in the end.

"The man to whom Nature has given a genius, or even a talent, for mechanics, positively wrongs his fellow man when he chooses to devote himself to a business in which he is less able to excel."

The reason why the group of skilled handicrafts does not command quite the social respect that it did during the Middle Ages and even in our own colonial days, is partly that the craftsman no longer controls his time and owns his instrument of production as he once did, but works for wages under a business man. Much of this current prejudice against overalls is, however, dissolving, slowly to be sure, but inevitably.

The forces which have changed the social status of the mechanic are many: the loss of ownership of tools probably stands first; our white-collar system of education looms large as another factor. The importation of foreign laborers who have monopolized our factories, mills, and certain trades cannot be overlooked, but the workingmen themselves have all along been singularly blind to their opportunities. Characteristically, in proportion to their incomes they spend their wages less skillfully and get less out of life than do the clerical and professional families of the same economic status. And yet they are to-day about the only social group, except the very rich and the very poor, who have any leisure. The hard-pressed business or professional man works nights and Sundays as a matter of course and seldom restricts himself to the artisan's eight or nine hours. And after his work is done he must still get the bodily exercise which in the other case takes care of itself in the course of the day's work. The whole world of culture is open to the mechanic who makes good use of his peculiar leisure. When workingmen exhibit more generally the brain worker's alertness, we may well expect to see, not only a greater number of Stephensons, Franklins, and Edisons emerging from their ranks; but in addition, persons of the type of Bunyan and Hugh Miller, who, while still continuing to be artisans, achieve enduring fame in other fields. At least, we shall hear no more of the social stigma which now attaches to even the highest grades of manual labor.

In a very real sense then, at the present time and in this country, the whole problem of vocational guidance in the city focuses on this group of high-skilled mechanical workers. Our object should be, in general terms, to bring up into it from below every promising boy or girl who has a reasonable chance to "make good" in it, to swing

Courtesy of "Charities and Commons"

A comparison of the maximum and minimum wages of girls with and without training

Courtesy of Girls' Trade School, Boston

There is an almost unlimited demand for women who can design clothes

across from the clerical vocations on the same level all the boys and girls whose predilections are not clearly on the clerical side, and to hold back from the business and professional group such persons as seem to aspire beyond their possibilities. This is the hole in the industrial system that needs to be filled. These also are the productive workers who add especially to the world's wealth.

Somewhat unfortunately, the high-skilled trades offer a distinctly better field for men than for women. Many of them demand heavier muscular work than most women can perform, and they nearly all require the prolonged apprenticeship before earning power begins, which makes them unsuited to the sex which must master two vocations. The type of high-skilled women's trades is the needlework group; and these may serve to illustrate the general principles which govern the entrance to them all.

The foundations for success in dressmaking, millinery,

and other forms of needlework are natural deftness of hand, good eyesight, at least a fair degree of bodily and mental quickness, a well-developed color sense, together with an uncommon amount of the peculiar knack which for want of a better name we call a sense of style. All these, however, count for nothing unless one has the temperamental ability to endure confinement without loss of health. All these qualities show early; the potential *modiste* is soon revealed by her own clothes.

Beyond these elements there is an almost unlimited demand, on the one hand for persons of original imagination who can design, and on the other for overseers and managers. The field, in short, offers entrance and promotion to a considerable range of talent.

The best preparation is a regular course in a technical school, for the best dressmakers much prefer the graduates of trade schools. Not a few high schools, also, are

Courtesy of Girls' Trade School, Boston

Girls who have received technical training in the trade schools are much preferred by high-class dressmakers

meeting adequately the demand for this sort of technical training; and teachers with a natural talent for this work can often, with profit, take up this sort of instruction.

Wanting this school training, the learner must enter an establishment as an apprentice. In either case, one cannot too much emphasize the importance of beginning at the earliest moment the process of self-cultivation which trains eye, judgment, and artistic sense. No mere skill of hand can take the place of the undebatable expert certainty that such and such a thing is exactly right.

A girl who is bright and attentive to her business will start with a wage of four to six dollars a week, and be advanced to about ten when she becomes helper to a head girl or finisher. Further advance depends on ability and on the marriage rate. A head girl on shirtwaists, for example, earns from fifteen to twenty dollars a week; a fitter from twenty to thirty. Beyond these come the artist and the business woman, who may make any sum.

Socially, the woman artisan stands better relative to the non-manual worker than does the man. She is, on the whole, less distinctly "classed." As for the sanitary, and still more the moral, conditions under which work is done, these vary all the way from the very best that can be imagined to the very worst. Each locality, therefore, even each individual shop, has to be rated on its merits.

When all is said, the mechanic arts are, in the long run, men's work. Virtually all of them, in the higher grades, presuppose more interest in machinery than women commonly possess.

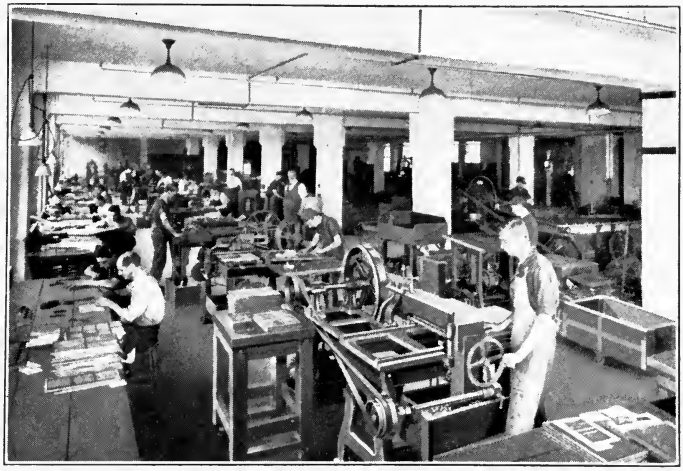
Given this prerequisite, the range of additional quality is very wide. A plumber, for example, requires only moderate skill of hand, while his tools are of the simplest sort. On the other hand, he has to have much good judgment and practical sagacity, enough scholarship to

understand the theory and practice of sanitary science, and enough imagination to follow plans and specifications, and on occasion to suggest schemes of his own. He needs also the resourcefulness to act in emergencies, and the wit to explain to his patrons the reason for his acts. All this means a high grade of general intelligence; and as a result the plumbers are the best organized body of mechanics in the world.

The machinist, on the other hand, has to be thoroughly acquainted with a considerable number of very complicated tools, and to do much of his work with an accuracy that is measured only in thousandths of an inch. Parts of his field lie at the very limits of human touch and eyesight. Yet, unlike the plumber, who rarely has two jobs just alike, the machinist will often have to repeat one monotonous pattern thousands of times, and he may never in all his life have to act quickly or on his own initiative. Any sort of boy, therefore, who can enter the mechanical field at all, has some work especially cut out for him.

In general, however, not over one quarter of the men in the mechanical trades are really good mechanics, in the sense that they have a thoroughly accurate eye and a nice hand. The best of them, it has been proved by careful psychological tests, have under the calloused skin of fingers and thumbs a delicacy of touch which the soft hands of the most refined lady do not so much as approach. But this trade touch comes only with long practice; and the prospective mechanic must be taken early and be in part self-taught.

Beyond this, under modern conditions, every boy ought to have a thoroughly good common-school education; and on top of that, at least two years of general technical training, rounded off with the more special work that looks



Electrotype foundry. A capable boy can work up in any shop and go as far as his native ability and his diligence will take him

directly to his vocation. The boy with these advantages will probably have to start in the shop at the same level as the boy who has them not, but within five years he should have more than made up his handicap. More and more are the mechanic arts taking on certain of the characteristics of the professions.

Even so, however, the boy whom poverty cuts off from this preliminary training is by no means shut out from even the highest levels of his trade. This, as we have already noted, is the one field where workers are always fewer than the demand for them. Foremen, therefore, are ever on the lookout for boys of ability, and ready to give them every possible help. Practically, a capable boy, no matter what his lack of advantages, can work up in any shop, and go as far as his native ability and his diligence will take him. To quote the striking report of the

sub-committee on the shoe industry of the Massachusetts Commission on the Education of Workers:

"If you go into any factory in Brockton or Lynn you will always find men in the best positions who have started at the lowest, and reached their present positions by their own effort and in no other way. A foreman will always find out a young man who is ambitious and trying hard to do his work well and for the interests of the business."

Certain important firms, moreover, still depend on the apprentice system — the Baldwin Locomotive Works, Brown & Sharpe, the Westinghouse Company, the General Electric, and Hoe & Company, among others. Not a few also, like the United Shoe Machinery Company, have a system by which promising boys are given half time at school and half time in the shops or at special preparation for their trade.

There is, to be sure, always the danger that some particular foreman, with an eye to his immediate output, will keep a skillful boy too long at work at one machine. But the boy can always counter this, when he and his counselor become certain that progress is impossible, by changing shops; and with evening study, guided, it may be, by one of the admirable correspondence schools of the land, go far in his vocation, even when he has not been able to command much preliminary training.

In general, on the other hand, shop masters do not look kindly on the graduates of literary institutions, from the colleges down. Book learning, therefore, beyond the common-school course, may in the beginning be something of a handicap. If he is of the right sort, however, and uses his book knowledge wisely, he will pass by many of his fellow workers who, his equals in all other respects, lack the advantages of institutional training.

Wages in the skilled handicrafts after the first few

apprentice years are high, four and five dollars a day being not uncommon. Forty dollars a week is about the limit even for the expert worker; but a "boss" may go to five thousand a year. Nowhere, moreover, in the entire industrial world, are the chances for promotion on the whole so good. Mediocrity will always stick where it belongs, but ability, of almost any type, is sure of prompt rewards. To quote once more the report of the Massachusetts sub-committee on the shoe industry:

"I know of two instances which have come under my observation within three years where young men have come into bottoming rooms without any experience and in that time have jumped into good paying positions, while other boys who began before them are still working at boy's pay. One of these boys came in to feed a heeling machine, and began at four dollars a week. He was attentive to his work, and from the first day began to watch and study the workings of the machine. If he was sent for a box of heels, he would go to the bin and bring them back directly without stopping to fool or talk with the other boys. If the operator of the machine had to fix or change any of the working parts, he would try to help and ask questions why such changes were made. Before he had been there three months, he asked to be allowed to heel a shoe; and as he showed that he had made good use of his observation, he was allowed to heel a few shoes. The business of the factory increasing, it became necessary to put in another heeling machine; and as soon as it was set up, this young man went to it as operator at piece work and jumped from seven dollars to sixteen and then to eighteen a week."

CHAPTER XII

Salesmanship

BUSINESS, in the general sense, has two sides, which in practice are somewhat sharply marked off from one another. On the one hand are the persons who make things; on the other, are those who sell them. Producer and distributor, manufacturer and merchant, factory and store, stand everywhere over against one another. Seldom does any one person have much to do with both. On one side are, in general, the white-collar jobs and on the other the work that has to be done in jeans. The one body is concerned with things; the other with people. For these reasons the decision between the two may well come early, since the kind of boy or girl who is naturally adapted to the one will hardly attain to any high level in the other.

The producers, as we have seen, have to choose between field and shop, to follow agriculture or the mechanic arts. In the same way, the distributors have to choose between counter and desk, and become salesmen on the one hand or office workers on the other. These two sorts of work demand distinctly different types of person. Into the details of this difference we shall inquire later. For the present we may content ourselves with noting that the popular boy or girl, with many acquaintances, will in general make the better salesman; the more retiring sort who concentrate their likings on a few intimates will take better to office work.

Roughly speaking, of the slightly fewer than seven million persons in the United States who are engaged in

trade and transportation, three million or a little less are selling goods.

The most workable classification of this group is on the basis of the chance for promotion. On the whole, the poorest chance to get anywhere is in the large department store, with its almost military organization. Floor boys and bundle girls, and "cash" of either sort, start at three to six dollars a week. If they escape from this work, they go to selling over the counter at about the same wage, and finally in the course of years rise to twelve dollars for one sex and eighteen for the other. Strait is the gate and narrow is the way that leads to the buyers and managers, and few there be that find it. Altogether, the chances are appreciably better in a small shop than in a large one.

The conditions, however, are rapidly changing for the better in nearly all the first-class department stores. The chances for promotion and the all-round development of the salesman must rise and fall together. The criticism of Miss Butler thus far as to the younger employees in mercantile houses, "their work tends to stultify rather than develop them," must be credited to the blindness of both employer and employee. When a system of education and training in salesmanship is wisely correlated with store work, the store life may become really developmental to the great majority. The sense of efficiency which comes through training means self-confidence, joy in work, and promotion on merit. The work of the Union School of Salesmanship has proved these points.

The sales departments of great manufacturing firms are, however, quite a different matter. These demand a totally different quality of person, and the opportunities they offer are incomparably better. The same also is true of the wholesale houses, which offer to ambitious

youths one of the best of all outlooks in the business world. Handling goods in a wholesale store is the natural place for a boy to start.

Oddly enough, the street hucksters and peddlers, and various persons who do a microscopic business "on their

Courtesy of "The Christian Science Monitor"

A class in salesmanship. The sense of efficiency that comes with training means joy in work and promotion on merit

own," often go very far. There is no system to keep them down, no waiting for vacant places just one step up. The least business of one's own gives a more immediate chance of success or failure than can any other field.

Best of all in its outlook on the future is selling goods on the road. A thoroughly competent man, who can satisfy both his customers and his house, who knows his goods from the ground up, and who has built up a clientage in some particular territory, will sooner or later find himself in a position to dictate terms to any employer. His goal is not infrequently a partnership.

One would guess offhand that selling things would be an

especially attractive field for women, for the work is light and the one great essential is tact. This is, however, only partly true, for the heavier work, as in grocery stores, must always be done by men. In the retail trade there are about three men to one woman, a considerably higher proportion of women than in most occupations followed by both. Department stores may even reverse the ratio and employ three women to one man. But among commercial travelers there are nearly a hundred men to each woman, among wholesale tradesmen nearly two hundred, while in certain kinds of trade—as, for example, machines and hardware—women are, in this country, almost unknown. One thing with another, then, the proportion of men and women trading directly with the customer is not very different from that in other vocations, and the demand for the services of women neither better nor worse. Apparently, however, the proportion of women tends slowly to increase, and is likely to continue so to do.

As between the girl who goes into a retail store to sell goods over the counter and the one who goes into a shop to make them, the distinction is rather one of personality than of ability. On this simple distinction, for five girls in ten, the choice between store and factory will have to be made.

The requirements for a saleswoman are well summed up in a Bulletin of the Girls' Trade Educational League of Boston:

"The girl who enters salesmanship should be able to use good language, and should dress neatly and appropriately in order to impress people agreeably. She should be able to write a legible hand, make clear figures, and spell correctly; a practical knowledge of arithmetic, especially fractions, is very important. Prime requisites for success are interest and enthusiasm and a knowledge of human nature. The born saleswoman takes a vital interest in her customer, in her department, and in her store. She studies

her goods, learns something of their manufacture, knows what their good points are, and is able to talk about them intelligently and truthfully. She is a good judge of people, and she has the sincerity and tact which enable her to help a customer so to purchase as to go away satisfied and come to her again. Such a saleswoman is alert and energetic, she gives strongly the impression that she is in her place to serve, and therefore never displays an indifferent manner toward one who asks her service. Loyal to her work, she is always courteous, for loss of temper means loss of a customer."

Nevertheless, there is a gift for selling goods. Most counter salesmen do not have it, any more than most hand workers are destined to be thoroughly good mechanics. Those who do have it, go far.

Curiously enough, this peculiar knack of selling things is not the same thing that we call business ability. Many successful business men are not good salesmen. Still more highly successful salesmen fail completely when they go into business for themselves, and have to buy and plan and manage. Selling ability really seems to be a special natural gift like a genius for music or a capacity for invention. Whatever its nature, it is one of the things to be watched for in the schools.

All forms of trading ought to be encouraged, among boys and girls alike, from buying and selling of seeds and plants in the school garden to swapping tops and marbles and candy on the playground. Somebody, naturally, will get cheated; and the teacher will have to revise an occasional bargain that violates the social contract. But the natural traders will appear, and begin to train themselves for their vocation.

Nobody, thus far, seems to have been able to analyze completely this peculiar selling gift. The largest element in it is evidently a sympathetic knowledge of human nature; the best salesmen are almost uncanny in their insight into the workings of their customers' minds.

Courtesy of Superintendent of Schools, Boston

In buying and selling at school the natural traders will appear, and begin to train themselves for their vocation

Mere nimbleness of wit also counts heavily; the man who thinks fastest and changes front most rapidly often makes the best bargainer. Yet he must be consistent, loyal to his firm while faithful to his customer's welfare, or in a short time lose out. Solidity of judgment and accuracy of information are no less important. Scholarship, therefore, is a large element, since the really good salesman has to carry a considerable mass of data and have every bit ready on his tongue at call. Skill with words counts; so that for two reasons the youth who cannot recite his lessons well in school will not be likely to sell many goods on the road or rise to any very high position in the store. But to know when to stop talking is just as essential, for many a man talks himself out of a sale.

Essential, too, for any large success, are the higher moral

qualities, and the mysterious element which we call "personality." For not only does the salesman often undertake large responsibilities for his employers, he also often stands to his customer in a relation not unlike that of a professional man to his client. To win and to keep the customer's trust is often the most essential portion of the salesman's work.

Moreover, for certain sorts of selling, especially for selling on the road or wherever the salesman must seek out the customer and make the advances, there must be a certain persistent fighting quality that rises to opposition. The boy or girl who is naturally shy, or reserved, or easily wounded, is by that fact quite cut off from certain forms of salesmanship and a good deal handicapped in all. The born salesman or saleswoman has a certain joy in battle that is innate and temperamental.

It has been maintained, probably correctly, that a successful salesman is almost invariably of the visual type of mind. Otherwise he cannot recall faces or transfer a sharp mental picture of his goods to his customer. "Picturesque" language, like that of the agent who sold a mechanical coal carrier by pointing out that to get a cat across the street you may either carry it in a basket or drag it over by the tail, is the natural product of a visualizing mind.

In short, the psychological picture of the salesman type is so fundamentally unlike that of the mechanical type that no vocational guide should have any practical difficulty in recognizing all well-defined examples of either. Persons of intermediate grade are more difficult to place.

When it comes to formal training for salesmanship, curiously little has been done. There are a few good books on the psychology of selling, while various large

Courtesy of Superintendent of Schools, Boston

Knowledge gained by the study of leather in the factory forms an important part of the equipment of the leather-goods salesman

concerns have established courses of instruction for their own help. Much can be done in the schools, from the primary grades up, by way of the study of raw materials and processes, since an interest in goods themselves, in addition to an interest in people, is part of the salesman's equipment. Habits of courtesy and of service also can be taught in school.

Before a traveling salesman introduces his merchandise he owes his customer the honor of having first thought about him, his family, and his welfare. This is not flattery, unless done by an insincere man. It is true courtesy; it shows the proper respect for the customer. It is evident that courtesy of this kind is not easily acquired, and is unknown except to genuine men with good training from early boyhood.

The budding salesman may well be encouraged to watch the performance of more experienced persons, to

make their acquaintance, and to notice how they sell things. Plans can be made for the students to go to the stores to study the methods of the best counter salesmen and saleswomen. Expert traveling salesmen are in town every day of the year. Often they have leisure time between trains. All are good talkers, and some can teach. With a little shrewd planning, the men of the right ideals and ability can be selected to give practical demonstrations of salesmanship to many kinds of customers.

One of the most successful schools for training saleswomen is perhaps the Union School of Salesmanship of Boston, organized by the Women's Educational and Industrial Union in coöperation with five large department stores of the city. A fairly good idea of the methods of study and training in this school can be obtained from the courses of study and the kind of examinations given here.

"The subjects taught," writes the director of the school, Mrs. Lucinda W. Prince, "were selected on the following basis":

1. To develop a wholesome, attractive personality: Hygiene (especially personal hygiene); this includes study of daily menus for saleswomen, ventilation, bathing, sleep, exercise, recreation.
2. To give familiarity with the general system of stores: Sales practice; store directory; business arithmetic; business forms and cash accounts.
3. To increase knowledge of stock: Color, design, textiles.
4. To teach selling as a science: Discussion of store experience; demonstration of selling in the class; talks and lectures on salesmanship and social problems such as: Attitude to Firm, Customers, and Fellow Employees; How to Show Goods; Trifles; Service to Customers; Vocational Training; Tuberculosis; The Meaning of Wages; The Department Store's System and the Saleswoman's Place in It.

The following are two typical examination papers:

An Examination on Textiles

1. Describe in detail a single raw fiber of each of the four textiles studied. What advantage for manufacture has each?
2. How do woolens and worsteds differ in raw material, in treatment, and in finished product? Give two examples of each.
3. Name three hair-bearing animals, and the textile materials made from the hair. Name three vegetable fibers, and one material made from each.
4. Give all the tests you know for a good piece of cotton sheeting, dress linen, broadcloth, taffeta.
5. Which of the four textile fibers are raised but little in this country? Why?
6. What is meant by natural color in linen and silk? Give two examples of natural colored silk and one of natural colored linen.
7. Compare cotton and linen as to durability, cost, beauty. What is meant by warp, plain weave, sizing, live fleece wool, spun silk?
8. Where is the greatest amount of raw material of cotton, wool, silk, and linen produced? Where is wool raised in the United States? Where is wool manufactured in the United States?
9. Tell all you know about the "boiling off" process in the manufacture of silk and the "weighting" which usually follows.
10. Name materials, class of fiber (animal or vegetable), and give talking points of samples in the envelope.

An Examination on Salesmanship

1. State ten cases in which it is necessary to have the signature of the floor manager.
2. What is the purpose of the sales slip?
3. Suggest three ways of finding out the price a customer is willing to pay.
4. Describe in detail an interesting sale which you have made or lost lately, and tell why you think it resulted as it did. Analyze the sale.
5. Name at least three things you can do to save time in making a sale.

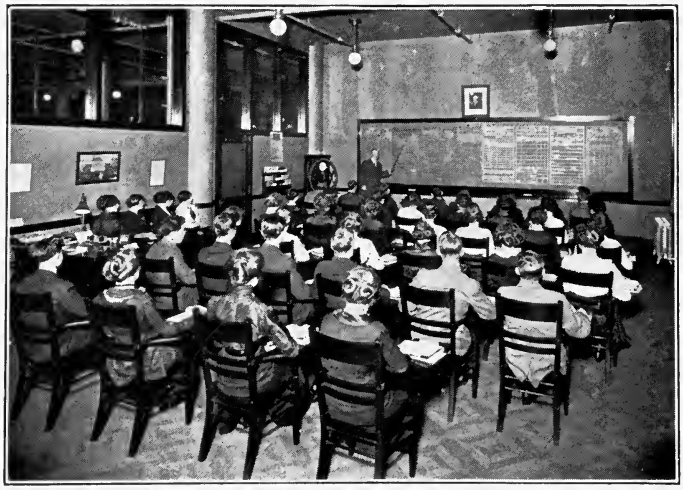
6. If you have a customer who has always worn a certain type of suit quite out-of-date, how are you going to sell her an up-to-date suit and make her feel satisfied when she has it at home?
7. Give four reasons why a firm reduces the price of merchandise.
8. Give an outline showing how some article from your own stock is handled from the time it reaches the receiving room until it is delivered to the customer.
9. What do you mean by selling or talking points? Give at least five talking points, and if possible more, on the following:
   (*a*) An article from the stock you are now selling.
   (*b*) An apron used in the demonstration sales.
   (*c*) A bureau from the handwork shop.
10. Name ten principles of good salesmanship which you have learned from the demonstration sales.
11. What do you consider the greatest need in your department, and why? What can you do about it?

It is evident that this kind of a course will help the student to become an efficient buyer as well as salesman. It trains both for home making and for salesmanship.

But when all is said, the salesman, more than almost any other worker, is self-taught, for no two persons can sell goods the same way. Few experiences of life are altogether foreign to his training. Every association with a different sort of people enlarges his knowledge of human nature. Every item of culture adds to his points of contact with men. More than all other workers, the good salesman is an all-round person, whose most important business asset is simple tact.

More particularly, the school boy or girl who looks to selling goods for a living should be encouraged to enter into every sort of social activity that offers itself. Practice in games is a great aid in understanding people; so too is work for school publications, societies, clubs, enterprises of any kind that throw people together.

Voice and manner count immensely, especially a certain



Courtesy of Marshall Field & Company, Chicago

Training counter salespeople in the general system of the store

quiet and self-confident poise that are the product of good health, muscular training, and social experience. Dress is important, and should be neither slovenly nor foppish. The best salesmen always contrive by their clothes to give an impression of habitual success. A knowledge of English, and the ability to make words tell, count for much. The merely glib talker may sell patented articles from door to door, but a really good salesman is an artist in conversation who knows when to be silent as well as when to talk. Professor Mahaffey's admirable little book on the art of conversation will be most suggestive. Last, but by no means least, is the power of concentrated attention.

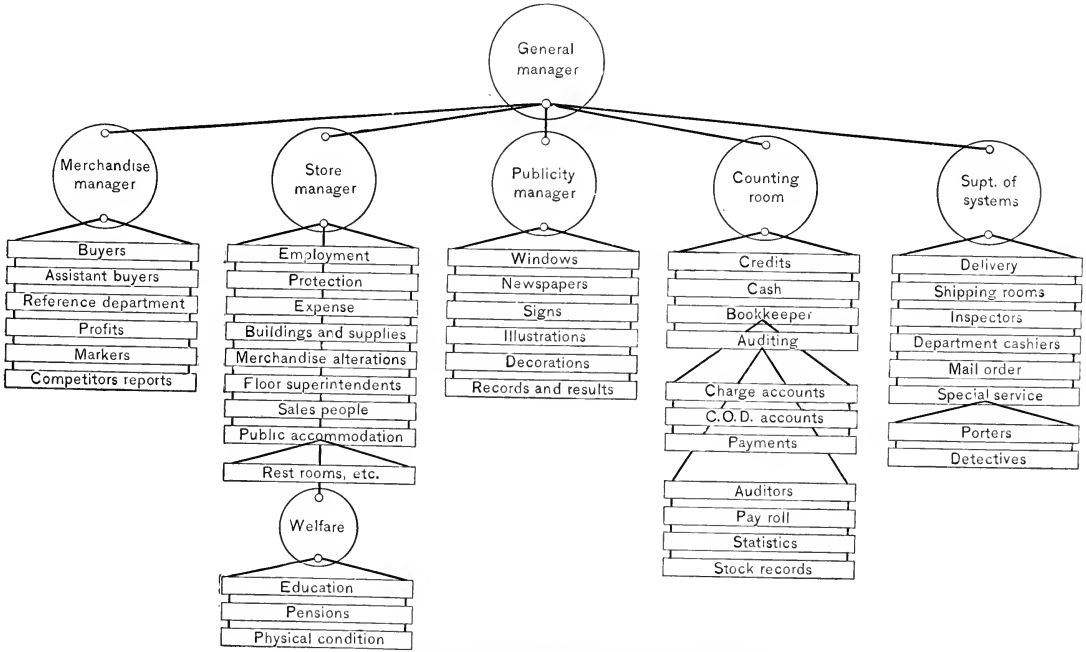
All these qualities, while they are based on inborn aptitudes, are in a high degree cultivable. It is therefore especially important that the prospective salesman should

discover himself young and begin early the process of self-equipment. Fortunately, there is no one of the qualities that go to make a successful trader that any boy or girl will ever regret having taken the pains to acquire, no matter what changes of vocation life may bring about. Says Fowler in a striking passage:

"It is true that great captains of industry have sprung from other than salesmen, but the vast majority sold goods. Many a bookkeeper has risen to the head of a firm, and the foreman of a repair shop may go to any height; but the majority of business men of success sold goods and earned their reputations by the quality of their salesmanship. . . . If one is willing to both give and take, to both float and swim, and is strong enough not to be overcome with present disaster and with constant opposition—and if he enjoys the storms of life, winning or losing as may be his turn, but winning more often than losing, then salesmanship offers him more than he is likely to receive from any other department of trade, and will give him better opportunity to round himself out into the successful man of business."

How true this is will appear from a simple calculation. If we reckon among the higher positions open to men all selling agents of various sorts, all real-estate dealers and insurance solicitors, all independent merchants, and all traveling salesmen, we find that the total number is over one half of all men workers in the entire world of trade. Or in other words, more than half the personnel of the commercial world is already out of the ranks and in positions of command. The other scant half, now the rank and file, is in training to succeed it. Evidently, where there are more desirable positions than there are workers preparing to fill them, the outlook for promotion is by no means dark.

Computed on the same basis, the chance of the saleswoman rising to an independent or managerial position is hardly a tenth part as good as that of her fellow clerk of the other sex.



Divisions of responsibility in a great department store

Probably, for a boy who has the right inclination, the safest path to business success lies through the wholesale house. He should enter a high-grade establishment and master the business from the bottom up. Then he should go out on the road and master the art of dealing with men. After that, he may hope to settle down at home as manager or partner. Whether, having essayed this plan, he carry it through to the end, or find himself stopped somewhere on the way, he will at least have done a work in which every day has brought a battle of wits, and will have played one of the most fascinating games there is.

As an aid in handling the practical local problem of vocational guidance for salesmanship, it will be found convenient to follow an outline similar to that already given for factories and machine shops.

PLAN FOR STUDYING A DEPARTMENT STORE OR OTHER MERCANTILE HOUSE

I. *Description.*
   1. Names.
   2. Location.
   3. Number of floors.
   4. Number of basements.
   5. Departments for management: Purchasing, selling, advertising, accounting.
   6. Salesrooms: Dry goods, millinery, white goods, silks, china, jewelry, stationery, hardware, shoe department, house furnishings, etc.
   7. Workrooms: Millinery, draperies, alterations, laundry, kitchen.

II. *Physical Conditions.*
   1. Counter space and seats for employees.
   2. Health conditions: Ventilation, dust, moisture, toilet rooms.
   3. Cloak rooms: Location, care.
   4. Rest rooms: Location, equipment.
   5. Lunch rooms: Equipment, service.

III. *Employees.*
1. Number: Maximum, minimum, average.
2. Same for men, for women, for boys, for girls.

IV. *Occupations of Employees.*
1. Men: Cash, porters, clerks, delivery, drivers, salesmen, heads of stock, floor walkers, buyers, officials.
2. Women: Cash, stock, wrapper, saleswomen, heads of stock, buyers, cashiers, milliners, alteration hands, drapery operators, kitchen and laundry workers.

V. *Hours of Work.*
1. Daily, Saturdays, Sundays, holidays, night.
2. Lunch periods.
3. Vacations.
4. Irregularity of employment.

VI. *Wages.*
1. Positions classified as above: Men, women.
2. Overtime pay.
3. Commission allowed on sales.
4. Percentage allowed on purchases.
5. Fines.

VII. *General.*
1. How is help secured?
2. Training required before entrance.
3. Methods of training and promotion in store.
4. Questions asked of applicant, teacher, or former employer.
5. Spirit of employees: Contentment, loyalty.
6. Nationality of employees.
7. Home and social conditions of employees: Living with family, sole breadwinner, other breadwinners in family.
8. Pension system: How controlled; contribution of firm and employees; sick and death benefits.
9. Comments of proprietor, foremen, and other employees.

For a thorough study of department stores, read *Saleswomen in Mercantile Stores*, by Elizabeth Beardsley Butler.

CHAPTER XIII

Office Work

SALESMANSHIP and office work have really much less in common than appears at first sight. To be sure, workers in both fields use brain rather than hand; while both types of vocation exact a somewhat high standard of manners, bearing, speech, dress, and general cultivation in all who are to pass beyond the very lowest rank.

With this, however, the resemblance ends. The office worker need not have the all-round acquaintance with human nature and the social tact of the salesman. He adapts himself less to a varied public than to a few associates or superiors. In general, grade for grade, he has to be more methodical and accurate, but less quick-witted and adaptable. The office worker, moreover, must be a steady, concentrated worker, turning off a somewhat monotonous task without the constant stimulus of contact with people.

Every teacher will recognize the type. It is the quiet, steady, scholarly sort of pupil, who comes out strong on examination marks and never "bluffs" a recitation, that is going to make an office worker. In fact, one may almost say that the vocation toward counter or toward desk will turn on this, that, native ability being equal, the one sort of boy or girl will shine in recitations and the other score high in examinations.

In general, too, as regards native capacity, the office worker follows more closely the middle way than does the salesman. On the other hand, far more rarely than

Where a well-known atlas is compiled. The making of reference books affords excellent opportunities for workers capable of steady, concentrated effort

the salesman of the highest type does the office worker graduate into an independent business position. The pen is mightier than the yardstick; but it is not the equal of the invoice.

Office workers in the United States number not far from eighteen hundred thousand, somewhat more than half as many as there are salesmen. One hundred thousand of these office workers are telephone and telegraph operators. More than two hundred and eighty thousand are stenographers. Over three hundred and eighty thousand are bookkeepers, accountants, and cashiers. Seven hundred thousand are clerks and copyists.

Especially interesting is the large proportion of women

workers in certain departments. Among bookkeepers and accountants there are nearly half as many women as men. Among stenographers they outnumber men three to one. Of telephone switchboards they have a virtual monopoly.

These, moreover, are the special fields in which the number of women is notably increasing, and from which they tend more and more to crowd out men. Much of such work is of a sort for which women are singularly well fitted by nature.

Desk work, in the widest sense, divides itself into several rather distinct sub-groups; and of these the one most easily entered is telephoning.

An intelligent girl of the same general sort who would do reasonably well behind the counter, may do slightly better in front of the switchboard. Her earnings will be about the same in either case, and her chances for promotion are equally slender; but the telephone operator does her work sitting down, while the condition of labor, though never better than in the best stores, is rarely anything but good. But on the other hand, there is night and Sunday work.

Not all girls can learn telephoning. Great coolness under pressure is essential, and the ability to attend to several different matters at once. To keep track of six booths, all handling out-of-town calls, to record each transaction on the printed form, to take pay and make change, to listen to several persons simultaneously, to keep the waiting line of hurried men in good humor, and to calm the mind of the patron who cannot get his connection, all at the same time, is one of the most exacting performances known to the business world. Few women and no men can do it. However, the ordinary work is much simpler; but even this, apparently, demands a

more or less auditory-mental type of person which is not especially common.

Promotion, though unlikely, is not impossible. The beginner starts at four dollars a week while learning and advances rapidly to six, eight, or ten. Beyond this comes

Telephoning demands an auditory-mental type not especially common

the charge of a public pay station, the oversight of operators in a large exchange, or the instruction of beginners. Wages for these kinds of work go as high as thirty dollars a week. Beyond this there is not much chance of an opening, since the managers and electricians have to be men. In general, the telephone companies give preference to graduates of high schools—for the sake, apparently, of securing material of sufficient quality to warrant promotion to the higher levels of the calling.

The stenographer-secretary group is also a woman's affair. There are a few private secretaries of business

men, statesmen, or diplomats who are males. Government and court stenographers, also, are commonly men. In general, however, this group of occupations is available for boys only as an entrance to the business or political world.

For girls, on the other hand, the outlook is most attractive and the range wide. At the bottom come the ill-trained and unintelligent who are something of a drug on the market, and seldom make more than ten or twelve dollars a week.

Abler and better trained women become head stenographers, private stenographers, or private secretaries. Such of these as can take dictation rapidly and accurately, keep track of the office routine, answer letters from mere general directions, and adjust themselves unobtrusively to the idiosyncrasies of their employers may make themselves highly valuable and earn twenty-five and thirty dollars or more a week.

For this grade of work a girl must have had a high-school education before her special training, have much natural ability, be careful, neat, and accurate, and in all respects a thoroughly ladylike and trustworthy person.

The qualifications for a good stenographer are well summed up in a bulletin of the Girls' Trade Educational League of Boston. These requirements will hold equally well for all the best office positions.

"If a girl hopes to succeed in stenography she must be possessed with intelligence, good judgment and common sense. She must have good eyesight, good hearing and a good memory. She must have good perception and be able to concentrate her attention completely on any matter in hand. In addition to these requirements she must be neat in executing written work and accurate to the last degree.

"It is absolutely necessary that she have a good education. No one has a more practicable use for a thorough knowledge of the

General office work embraces all grades of employees, from the unskilled brain worker who files cards to the highly trained college graduate

elementary school subjects than a stenographer. She must be a speller and be practically familiar with the rules of good grammar and punctuation: nor is the arithmetic of little importance, for she cannot tell when she may be called upon to turn it to account in connection with her work."

And in her interesting book, *Woman at Work*, Miss Bird says:

"No education is too comprehensive to be of value here: and the girl who can be trusted to make a lucid, correctly punctuated and well expressed letter of one sketchily dictated by an employer in a hurry or scrawled by him on a scrap of paper is sure of his favor. The girl who can compose the letter for him on his spoken instructions is a still rarer and greater treasure."

Experience is our great teacher. Here is the testimony of a girl who has tried and knows:

"I would be a much better stenographer to-day if I had more general education, and I could earn $65 a month easily. I have had one such position, but I couldn't keep it because I didn't know enough."—*Vocational Survey of Minneapolis.*

Higher still come the specially trained private secretaries, for whom shorthand and the typewriter are mere incidents. These are college graduates, who handle accurately three or four languages, or else have a highly developed control over their own. They are the aristocracy of the group, and their salaries may be anything.

Closely parallel to the stenographer-secretary series runs the group of general office workers. These at the bottom are the unskilled brain workers who copy records and file cards. Upward, they pass through all grades to the highly trained persons who organize recording systems, read proof, or catalogue books in a dozen different languages. On the higher levels, these workers also are largely college graduates. This group, as a whole, is much less exclusively feminine than the other, and the outlook for a boy is good.

The special field for men in office work is, of course, bookkeeping. Expert accountants and actuaries are the aristocracy of the group. Their incomes occasionally go beyond four figures.

CHAPTER XIV

Foremanship

THERE is one feature of the modern industrial world which commonly excites less attention than it merits, a feature, in fact, which is almost characteristic of modern industry as distinguished from old-time labor, and to which, in no small degree, the extraordinary efficiency of modern industry is due. This feature is foremanship. Few persons nowadays set their own tasks. Wherever we dip into the modern business world we find always some men and women who are responsible for the work of others. They direct other people's labor, and partake, justly, in some degree of its rewards.

We do not here refer to the great captains of industry, the generals and commanders of the industrial army, but to what we may call its non-commissioned officers. Here belong the shop foremen, head bookkeepers, floor walkers, charge nurses, gang bosses,—all persons, in short, who, having mastered some one occupation, do their work enough better than their fellows, and have enough power of command, to be put in charge over them.

Few persons realize how numerous is this group. The great majority of farmers, for example, at least during some time of the year, supplement their own labor by hired help; some employ a hundred hands at harvesting. Virtually all business men have their force of clerks and salesmen. Every shop is so organized that each ten, twenty, fifty, or one hundred workers are under the immediate charge of some one superior. Each school has its principal. Even the clergyman has his staff of

Photo-engraving. The typical foreman is an experienced workman who in addition to his special skill has the gift for handling men

voluntary workers, on whose efficiency the welfare of the parish in no small degree depends.

Our typical foreman, then, is the experienced workman, either with hand or brain, who in addition to his special skill has the gifts of character and personality which enable him to govern other workers. The foreman knows his trade; in addition he knows how to handle men.

This foremanship ability appears also among persons whom we do not commonly think of as foremen. Railway conductors have it; so do policemen, and some janitors and gate keepers. All successful teachers must have it, else they cannot maintain discipline.

From the standpoint of the vocational guide, then, foremanship ability is a peculiar talent which may be added on to any other kind of capacity. The boy or

girl has a vocation for keeping books or for keeping house. Then in addition, each has, or lacks, the ability to direct other people. The difference means a tenth more wages, or twice as much, for no harder work. It may mean the certainty or the impossibility of high success.

Of earmarks by which the foreman-to-be may be recognized early there are few. There are successful managers of the "driving boss" type—red-faced, loud-voiced, heavy-handed, profane. There are equally successful leaders of the opposite sort. Apparently, they all possess strength of will, courage, self-reliance, insight into human nature, and a sense of justice; yet all these are possessed in equal measure by persons who are not leaders. Even the ability to remember faces and to call people by name, on which some persons have laid much emphasis, can hardly be of much consequence for the captains of tens and twenties.

The one certain element seems to be this, that the coming foreman or forewoman is from youth of independent character and not the sort of person who is easily influenced by others. The desire for leadership among one's companions, together with a resistance to being led, is the one sure foundation for foremanship.

In other words, the foreman is largely made. He learns to understand people; he acquires the habit of managing them. So much of foremanship quality as is a natural gift is also a delicate plant that promptly withers in an untimely frost.

The qualifications of an ideal foreman are thus defined in the *Cyclopedia of Modern Shop Practice:*

"Toward the firm the foreman should be respectful, obedient, and energetic; toward the workman he should be fair, just, and sympathetic. Of all the qualities going to make an ideal foreman,

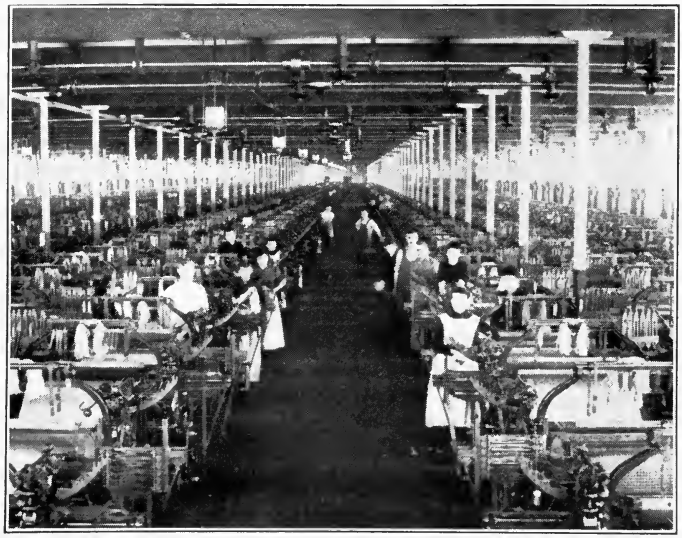
that of tact is the most important. It means that the men will be treated as individuals, their failings noted and corrected; their good points enlarged upon and due credit allowed for them. With this tact, or the faculty of governing along the lines of least resistance, must be employed absolute fairness. Nothing will create such an atmosphere of discontent as that the foreman has favorites. Fairness, dignity, and firmness are the qualities that can be quite closely defined; but tact and its fellow attribute, executive ability, are rather illusive of close description."

Ruskin, though not a man of business, pictures the spirit of an ideal foreman in a very few words. "Supposing the master of a manufactory saw it right, or were by any chance obliged, to place his son in the position of an ordinary workman, as he would then treat his son, he is bound always to treat every one of his men."

The old saw, that vinegar never catches flies, applies to the work of a foreman. He must, of course, become an expert in the technique of his selected field. This comes only through years of training. But in all the studies of foremen in store or shop, good judgment, sympathy, and leadership are the cardinal qualities. In school days the counselor can easily detect and encourage the disposition to take responsibility and leadership.

Every youth, then, should start out with this ambition, that whatever sort of work he undertakes, or whatever its grade, he will come to the top of his particular little heap. Since, in the industrial world, there are, on the average, somewhat fewer than ten subordinates to each leader of the lowest grade, the ambition is by no means an unreasonable one. The habit of leadership once established, the field is wide.

The opportunity for rising to leadership, however, varies greatly in different employments. In business, as we have already seen, the chance is about one in two, though in certain special lines the proportion drops to one



Of persons employed in the manufacture of cotton goods but one in eighty ever rises to a foremanship

in three or four. Carpenters and bakers have about one chance in five to become foremen. Printers, carriage builders, and leather workers have one in ten.

But persons who are employed on ready-made clothing either for men or for women, on boots and shoes, or in meat packing, have but one chance in twenty or thirty to lift themselves from the ranks. In hosiery and knit goods, in iron and steel, in paper and wood pulp, in silk, woolen, worsted, and felt, the opportunity of rising to foremanship becomes only one in forty or fifty. Last of all, only one person in eighty who is employed in the manufacture of cotton goods ever comes to the oversight of other workmen.

Curiously enough, the occupations where the chances to rise are least turn out to be just those in which persons under sixteen are largely employed, so that the one

characteristic is a test of the other. This is one of the matters to be taken into consideration in advising any youth of promise.

For this training in leadership we must put high the give and take of school life. It has been said that the advantage which the city man has over the country man in organization and coöperative activity of various sorts is due in large measure to the fact that the larger schools of the city give more chance for leadership to develop. Be this as it may, there is no training ground for foremanship superior to the playground of a fair-sized and well-conducted school.

The would-be foreman, then, should make it a point to get into all school games. He may not play well; but he will play well enough to do what for him is vastly more important, namely, to organize games among boys who for the moment are out of amusement. From this beginning he will soon advance to enterprises of all sorts,—swimming or nutting expeditions, camping trips. Gradually he will acquire a quiet control over other boys, develop a sense of justice and a knowledge of human nature, and the habit of leadership. This is his starting-point. In general, foremanship and salesmanship begin at about the same place, and depend a good deal upon the same characteristics.

Beyond this first step comes the general training of experience which brings self-reliance, initiative, and the habit of responsibility. All social activities contribute to this, especially contact with many different sorts of people. College life counts heavily here, and membership, and still more office holding, in almost any sort of club or society.

The only safe rule, therefore, is to give every boy or girl all the social training possible. This is especially

important between the ages of fourteen and eighteen, when the social instincts are developing and the permanent social habits are being formed. But for social education there must be groups and numbers. It is in this field that the county consolidated school makes perhaps its greatest contribution to the solution of the rural problem.

All social and coöperative organizations demand leaders. "Grange influence," says Miss Mabel Carney, "has developed leadership, has sustained a high idealism of personal integrity and social responsibility, and above all has fostered the spirit of coöperation through which this idealism has been worked out and made tangible for community benefit."

Of formal preparation for foremanship there is little. Some shops have special courses for boys who wish to become foremen; a few institutions which train for the technical arts have been able, without much deliberate purpose, to turn out graduates who rise to the top. The Hebrew Technical Institute for Boys in New York City, for example, has forty-two per cent of all its graduates of ten years' standing in positions of responsibility, either as foremen, superintendents, managers, or proprietors.

Men who are training their own sons commonly put them in at the very bottom of the business and work them up, usually without any special favors but with rapid promotion. Experience shows that there is no method to be compared with this for giving to a youth a sympathetic understanding of working men and women.

Most foremen, however, are shop-trained. The young man learns his business, whether it be making or selling or keeping records. Then gradually his native quality or his self-education begins to count, and he comes to the front. To quote once more the excellent report of the Massachusetts sub-committee of the shoe industry:

Courtesy of "The Christian Science Monitor"

To the shop-trained youth with the qualities for foremanship work in the continuation school is an advantage

"If a workman in any department has an ambition to become a foreman, he should try for a position under some successful foreman and study to learn the ways of running a room. Good foremen are always in demand, and there is hardly a day but changes are heard of. If a young man can show a manufacturer that he is fitted for a foreman's position by his knowledge of the different parts of the work and methods of forwarding work through the department, it will not be long before he has secured such a position."

In spite, however, of these opportunities, there is a marked dearth of competent foremen. In the Chicago investigation nearly three fourths of the employers reported difficulty in finding or training suitable overseers. No less than ninety-eight per cent of the foremen in New York factories were born and trained across the water — a fact which needs no comment.

The larger factories must have at the head men who can buy raw materials, sell the finished product, handle men, and know the technique of the manufacturing processes. The retail and wholesale stores must select their officials from the most efficient buyers, managers, and salesmen. Foremanship is, therefore, one of the most direct roads to the highest official positions.

CHAPTER XV

The Professions

TO the vocational guide the professions offer a double problem. There is, on the one side, the youth who by ability, opportunity, or family connections is distinctly called to pulpit, bar, or hospital; or who is, at the least, fairly entitled to consider the possibility of a learned career. On the other hand, there is the youth, and still more often the parent, who regards a profession as a place where one "will not have to do any work." Needless to say, the latter sort is rarely drawn from the professional classes.

On both these accounts the vocational counselor ought to face squarely the actual condition in a field which it is more often wise to warn candidates to avoid than to persuade them to enter.

Truth is, the professions in America are scandalously overcrowded. In 1890 there was one lawyer to each eight hundred persons, children included; in 1900, one to each six hundred and fifty; in 1910 the number had grown to one for each five hundred. Of doctors, there is one to every six hundred potential patients, of whom, obviously, even during an epidemic, only a small number are ever sick at the same time. The state of affairs in the ministry has become notorious. One clergyman to each seven hundred inhabitants, and not half of these churchgoers! All through the country are churches so ill-equipped that a half-dozen of them combined would hardly support one pastor in decent comfort. In general, the proportion of American men and women in the

professions is about twice as large as, for example, in Germany. And there is no dearth there!

The conditions in medicine and law are well summed up in the recent report of the Carnegie Foundation on Medical Education. What is said there will apply equally well to the ministry:

"For twenty-five years past there has been an enormous overproduction of uneducated and ill-trained medical practitioners. This has been in absolute disregard of the public welfare. Taking the United States as a whole, physicians are four or five times as numerous in proportion to population as in older countries like Germany. . . . In a town of two thousand people one will find, in most of our states, from five to eight physicians, where two well-trained men could do the work efficiently and make a competent livelihood. When, however, six or eight ill-trained physicians undertake to get a living in a town which will support only two, the whole plane of professional conduct is lowered in the struggle which ensues, each man becomes intent on his own practice, public health and sanitation are neglected, and the ideals and standards of the profession tend to demoralization.

"A similar state of affairs comes from the presence of too large a number of ill-trained lawyers in a community. When six or eight men seek to gain their living from the practice of the law in which at the most two good lawyers could do all the work, the demoralization to society becomes acute."

Needless to say, the results of this overcrowding are most deplorable. The lawyer turns or is driven to politics, business, shystering; the physician picks up odd jobs, and waits; every year many clergymen, fairly starved out of their sacred calling, give up their parishes and go into business. Thus the standards of the professions become demoralized and the whole plane of professional conduct is lowered.

Quite erroneous notions are abroad concerning the size of professional incomes. Successful lawyers do gain enormous fees, but their expenses also are heavy. Famous surgeons and consultants charge high for brief service,

but not infrequently they do large amounts of equally good work for nothing. Engineer and architect live on the narrow margin between their intake and the cost of their office force.

Prizes in some of the professions are indeed great—but they are correspondingly few. The average professional man in the United States, ten years or more after completing his formal education, does not make more than fifteen hundred dollars a year; and he has waited until after he is thirty to do even that. The pay of the average clergyman is still lower,—less actually than that of a good mechanic who began to earn at sixteen and was on full pay at twenty.

That the less successful members of the professional classes seem to be better off than the higher levels of manual workers is due largely to their greater frugality, not to their greater incomes. Comparison of family budgets shows that in the one greatest item of family expense, namely food, the "standard of living" of professional men is notably lower than that of working men of like or even of smaller incomes. In short, a capable young mechanic, if he should adopt the standards and practices of the ordinary professional man, and marry a wife of the same tastes, training, and ability, would probably find himself at forty quite as well off in this world's goods as the people whom he now envies.

The first duty of the vocational guide is to respect every boy's ambition, for it is much easier to guide than to kindle interests, but she can safely tell the plain truths and thereby frighten off all youths who aspire to professional careers in order to find an easy job, and warn the remainder of the long and arduous preparation that is before them, and make sure that they are counting the full cost.

There is, however, absolutely no way of telling in advance whether any boy or girl is going to be suited to any particular profession. There is not even a psychological type that is especially adapted to the professions in general. The most that one can say is that the professions are traditionally "learned." Any sort of ability finds its place, provided only that its grade is sufficiently high. But the pupil who is not bookish enough to rank well up toward the head of his class is probably not up to the professional standard.

Many writers on vocational matters have dwelt at length on the qualifications for various callings. Anybody can do this at any length, provided his psychological analysis is sufficiently bad and he jumbles together native aptitudes and the results of the practice of the profession itself. As a matter of fact, though many lawyers are exceptionally good speakers, many are quite dumb; the fact that a schoolboy shines in declamation does not raise any special presumption of a call to the bar. No more does excellence in school composition indicate the budding literary man, nor a solemn "bedside manner" the coming practitioner of the healing art. Virtually all the peculiarities which we associate with lawyer, clergyman, or physician are the results of his training, or the years of practice in his profession. Few of them are native; none of them are discernible in boyhood. The only point on which the vocational guide can put his finger is this, that a physician, an architect, and commonly an engineer, must have a mental imagery of the visual type. In a very real sense, moreover, lawyer, clergyman, and editor are the flowering out of the salesman type of worker; surgeon, architect, and engineer, of the mechanic type.

In the United States the three old professions are

about equally well represented, with medicine slightly in the lead — one hundred and thirty-odd thousand doctors against one hundred and ten to fifteen thousand of each of the others. Of the three, the law is the most specialized, offers the greatest prizes, and probably slightly the largest average income. The ministry, hardly specialized at all, has the smallest average earnings, and few great prizes, if the moral side is not considered.

In none of these fields is there an even chance for a woman. To be sure, there were above three thousand clergywomen in the United States in 1900, almost one thirtieth of the total number of ordained persons; but their opportunities are restricted to the less conservative religious bodies, and usually to churches too poor to hire a man. Even with four fifths of the church members women, a woman enters the pulpit more or less on tolerance. But in connection with church work, positions as deaconesses, district nurses, and social workers are giving to women a constantly enlarging sphere of influence.

Of lawyers, women number less than one to the hundred. Their chief clientage is among women, and because of social customs they are practically prevented from reaching the highest financial success. There is no good reason, however, why women should not become the best of legal advisers, particularly for women and children.

As a matter of fact, they are fast entering this field through the juvenile courts, and one efficient woman probation officer is worth and is actually filling the place of many lawyers of the old school.

As physicians, their chances are relatively better, about one to every seventeen men. They practice largely among other women or devote themselves to the diseases of children. In the latter field they have achieved high success.

A familiar scene in the juvenile court. Because of their special fitness for the work, women have almost a monopoly in this court and through it are fast taking an important place in the legal field

The fact is, most men prefer other men as their professional advisers. Most women also prefer men. So long as things are as they are, only a very few women of the highest grade of ability can find a place. Some of this prejudice against women is the direct result of deep-seated instincts which are not quickly changed, but a large part is the result of customs which are easily changed. One may regret the injustice of the present situation, but the vocational counselor must face the facts. It should be noted, however, that although the opportunities for women in these old professions are restricted, yet the number of women doctors nearly doubled, of women ministers trebled, and the number of women lawyers increased nearly five hundred per cent in the decade from 1890 to 1900.

On the other hand, there are two professions in which women outnumber men—in teaching by three to one, and in nursing by ten to one. Now teaching is related psychologically to both law and the ministry. The kind of woman who, if she had been a man, would have succeeded in pulpit or at bar, will in most cases, being a woman, do better by herself behind the preceptoress' desk. The legal type will, on the whole, incline to high-school and college work; the pastoral to the grammar grades. Besides these, there are, of course, innumerable special subjects to be taught—singing, dancing, art, music, cooking, gymnastics.

Many kinds of social and philanthropic work, also, demand the same types of professional ability as the ministry and the law. This is a field where native sympathy and scientific methods combine to render high service, with correspondingly high rewards. The work is especially open to women of high talents and special training. For the higher vocations open to women read

Courtesy of Extension Department, Alabama Polytechnic Institute

In rural districts a new vocation is represented by the county agent, who instructs girls in scientific methods of canning and preserving

The teaching of gymnastics is a field offering ample opportunities for women

Vocations for Trained Women, by the Woman's Educational and Industrial Union of Boston.

Fully three quarters of the professional women in the United States are now teaching, and the number continues to grow—a sure sign that those already in the profession are doing well. The president of Wellesley College, of Mount Holyoke, and of Bryn Mawr, and the Superintendent of Schools in Chicago, to mention only a few striking cases, are all women. Not many persons in any vocation surpass the ten and fifteen thousand dollars a year which fall to the head mistresses of a few ultra-fashionable girls' schools.

The social rewards of the woman teacher are also high, and the work is one of the best introductions to home making of any outside calling. On all accounts,

then, unless a girl's vocation toward one of the allied men's professions is strong and unmistakable, teaching offers her the better chance.

The same course of reasoning applies to the two branches of medicine. Few women, comparatively, make good physicians, and fewer, good surgeons — and when they do, the

The school nurse has an important work in a well-specialized medical field

public in general declines to employ them. On the other hand, men seldom make good nurses. There is a call for a few men for cases requiring much lifting, for sanitarium work, and for the dangerous insane. Other than these, the profession is virtually given over to women.

It used to be said that a nurse could never succeed without uncommon physical stamina and peculiar ability to get on without sleep. This is no longer true. The profession has become thoroughly specialized, quite as

much so as other medical fields, so that school nurse, district nurse, visiting nurse, and office nurse keep the same regular hours as any other people. The profession is exacting; but equally so are most other fields of labor of the same grade.

Teaching and nursing, it is interesting to note, are related much as are two other vocations especially open to women, salesmanship and office work. Teaching and selling cover the wider range from top to bottom in capacity, training, and rewards; and they presuppose more interest in human nature. Nursing and office work are more given over to women and are less in the public eye. Nursing, moreover, like office work, offers many openings to executive capacity.

In the educational field the executive positions as principals and superintendents are good opportunities for men, with fair financial returns. In the newer fields of manual training, the teaching of trades and agriculture, which the vocational interest is widening, there is a great demand, which will continue to increase, for men teachers, and salaries are adequate.

The newer professions, such as the engineering group or the various subdivisions of the writing art, though already much overcrowded, have this peculiar advantage over the three old professions that they are closely tied to the industrial levels next below. The briefless lawyer, the clergyman without a living, the physician whom no patient consults, are left hanging in the air. There is nothing underneath for them to drop on. But the architect can make a living at drafting, the engineer can run levels, the editor can go out and get news. All these newer professions have grown up lately out of some trade or craft or business. There is no dividing line between their different levels, and every youth, whatever

his ability or his training, is pretty certain to hit his place somewhere.

For this reason, there is less risk in essaying one of the newer professions than in attempting medicine, the ministry, or the law. There is no being admitted to the bar, licensed to practice, or ordained to preach so that one is either completely in the profession or else entirely out of it. Moreover, it is perfectly respectable, under the less severe etiquette of these newer professions, to get a living by any honest labor in the general line of one's training — a young architect may draw comics for the newspaper when a young clergyman may not recite monologues on the stage. For this reason, the youth may safely be encouraged to aim high in certain vocations when he may not in others.

Courtesy of Extension Dept., Alabama Polytechnic Institute
An interesting vocation is open to the corn-club boy in the increasing demand for teachers of agriculture

Some of these newer professions, as for example the engineering group, are virtually closed to women. On the other hand, all sorts of literary and artistic occupations are freely open to them on the same terms as to men. Several of these, moreover, notably writing stories and painting, may be followed along with home making and

after marriage. All of them, therefore, for one reason or for both, offer especial attractions to talented girls.

It is well also, in advising girls to enter the professions, to bear in mind that while men have the greater absolute number of openings, the opportunities for women are appreciably more numerous in proportion to the total number of women engaged in gainful occupations. Moreover, promotion is, as in every field, always more rapid for women than for men, for the reason that the superiors of women marry off as well as die. The consideration has especial weight in the professions, since there the first start is peculiarly difficult.

In brief, then, the problem of the vocational guide confronted with an aspirant for one of the professions is to be handled by a few simple rules. First, warn every one against entering the professions. Second, swing as many as possible of those who persist from the older, "learned" professions to the newer, useful professions. And third, if a girl inclines to one of the masculine vocations, enlarge at length on the advantages of the corresponding feminine vocation.

CHAPTER XVI

The Foundations of All Success

WHEN from the foregoing general survey of the industrial field the vocational counselor in the public schools turns to the practical assistance of boys and girls, she promptly discovers that she is dealing as little with any *tabula rasa* here as in other departments of education. Rarely during the grammar-school course can one say, either to youth or to parent: "Here are such and such qualities, which point with absolute certainty to such and such a calling. Let that, therefore, be the life work." Long before the boy or girl takes his elders into his confidence he has already made up his mind that certain occupations attract him and that certain others repel. These intuitions are often sound. Sound or not, they have to be respected.

Now these childish predilections, awkward as they may be for the professional vocational counselor outside the schools, for the parent, or for the family friend, are really of very great help to the teaching guide. Her problem is a double one. Not only has she to guide the youth to a wise choice of work, but she has in addition to turn back this vocational interest and use it to dignify and to vitalize the everyday work of her classroom. The latter is by no means the less important. The precise direction of the pupil's progress in his early teens is of less moment than his motive for moving at all.

The grade teacher then, who knows the vocational interests of her pupils, can say: "You wish to become a stenographer and typist. Well then, you must learn

to spell; and the time to begin is with to-day's lesson." The prospective office worker must never make mistakes. The prospective salesman may never be absent-minded or cross. The prospective teacher of gymnastics must not slouch over a book. In such ways as these, very specifically, the teacher may show each boy or girl how this, that, and the other piece of school work is counting directly on his future life work; how this, that, and the other neglect is keeping him from his special goal.

But the vocational interest once aroused, the vocational point of view once assumed, the teacher may go much farther. Information of a particular sort may count toward a particular success, or it may not. Deficiency of a certain kind may handicap one worker, but not another. The very insistance of the vocational motive may lead the prospective mechanic to wonder why he should learn to spell; or the saleswoman, why she should bother with her drawing.

For these reasons the teacher should, from the beginning of her vocational work, lay stress on the foundations of all success in any calling. Certain elements are common to all occupations; lacking them, no boy or girl will ever go very far in any. Indeed, in the last analysis, it is just because certain items of information and certain mental and physical habits are essential to any kind of grown-up work, that all elementary schools unite in spending most of their effort on them.

The list is, of course, familiar. On the one hand there are power of attention, promptness, accuracy, steadiness of temper, cheerfulness, courtesy, order and system, honesty, faithfulness, foresight, industry—all the long list of qualities which the common schools and the experience of life usually manage to inculcate. All these are, at least in part, habits. The serious-minded child can be led

deliberately to cultivate them by many different motives —among which, by no means weakest, is the vocational.

On the other side come the traditional subjects of school instruction and the more modern disciplines that have been added to them. It is a stupid child who cannot be made to see the difference in the financial position of adults who have not mastered the three R's and of those who have. A little attention to what the well-to-do classes actually know and can do, as compared with the less fortunate, will commonly answer all "what is the use" questions. In short, the child may early be made to see the definite value both of sound habits and of general mental training.

Much of this appeal, however, must be managed shrewdly. Children commonly get so much concerning the value of sound knowledge and good habits that the whole thing takes on something of the unpleasant flavor of the "drunkard stomach physiology." Church and home unite in preaching the moral and spiritual aspect. The school may well freshen this appeal by a little cold-blooded business.

Let us then replace the Belgians at Waterloo, the Boy at the Dike, the Loose Nail in the Horse's Shoe, and the rest of the immemorial stock stories, by fresh anecdotes of the commercial world, taken, if possible, from the industries with which the pupil is already familiar, or, still better, from the experiences of people whom he knows. The wide-awake teacher will have no difficulty in picking these up either at first hand, from biographies, or from the pages of trade periodicals. Boys, especially, are great hero worshipers. If they can see that any actual man, about whom they have heard outside school or seen with their own eyes, has turned any knowledge, habit, or custom to any practical and useful end, that point is proved.

System, for example, like other periodicals of the same class, is full of anecdotes to illustrate the business virtues. There is, among others, a capital story of a tactful salesman who pronounced the trade name of his ware indifferently, following always his customer's lead. His business was to sell goods, not to meddle with people's English.

It would be hard to find a better illustration of the importance of accuracy than the following from *System*. Mr. John Harper, living in a little town in Wyoming, sent in an order for goods amounting in value to $146.92, and accompanied it with a draft for the full amount. But the clerk who entered the order let his mind wander for an instant, and left off the initial figure one. Harper, therefore, being credited with only $46.92, got his goods shipped C. O. D.

Now Harper happened to live one hundred and ten miles from the railway. It took him three days to drive in. Naturally, thinking his goods fully paid for, he did not have $100 in his pocket. He returned home, therefore, empty handed, and started a long correspondence with his dealer. In the course of time, the error was run down and rectified. Harper once more spent a week on the road — and the dealer paid him damages that wiped out his profit several times over. The two seconds' inattention of the order clerk cost the amount of his wages for as many weeks.

The advantages of such stories as these are two. For one thing, they are not meant for the edification of infants, but for the instruction of business men, who read trade journals. They have the flavor of the grown-up world. For another thing, they are not shopworn moral tales, but fresh "news items," the happenings of the past month, that occurred in places on the map. They are fresh and real, as too much of our teaching is not.

VOUCHER NO. 1

All answers made by vouchers must be in ink and in their [the applicants'] own handwriting

The Applicant must not fill up or sign this Voucher.

I hereby certify that I am over 21 years of age; that I am a citizen of the United States; that my occupation is.....; that for.....years I have *personally* known....., the applicant named above; that I have read

(Write name to agree exactly with applicant's signature.)

the foregoing application and believe the answers therein made to be true; and that the answers to the following questions with respect to the applicant are in my own handwriting and are true to the best of my knowledge and belief:

1. Are you related to the applicant? If so, state the relationship. .....
2. Is the applicant a person of sober and industrious habits? .....
3. Is the applicant a person of good moral character and of good repute?.....
4. Is the applicant trustworthy and would you yourself trust the applicant with employment requiring undoubted honesty?.....
5. Are you aware of any physical ailment, disease, defect, or anything else that would tend to disqualify the applicant for the public service?.....

Date,....., 191 (*Signature of the voucher.*).....

(*P. O. address.*).....

Section from a Civil Service application for examination for post-office position

Stories to the class, quiet hints in private, is the working method. Teaching, be it observed, is one of the human-nature vocations where tact is presupposed. No one practical method, however, is more vivifying both to teacher and pupil than the study of the actual requirements of actual employers.

The United States Civil Service Commission, for example, issues large blank forms on which each candidate for a government position has to set forth his equipment in the general qualifications demanded for all. So also do the various State Commissions. Many large private or public-service corporations do the same—the several branches of the American Telephone Company; nearly all railways; many great packing firms; manufacturing and mercantile houses of various sorts; all employment agencies large or small; virtually every business, in short, which has more employees than one man can carry in his head. Besides these, there are the bonding and surety companies which make themselves responsible for the competence and integrity of trusted officers of all sorts, and risk ten, fifty, a hundred thousand dollars on the quality of a total stranger. These last, one may be sure, do not spare inquiry.

All of these, in addition to the questions addressed directly to the applicant, send also blank forms and ask for private and confidential information from pastors, teachers, friends, employers, and the like. Both kinds of document are easily obtained. If they are the inquiry sheets of some famous organization, still better of some local body, their effect on the pupil is so much the more impressive.

Any teacher may well spend the small effort necessary to collect a set of such documents. If she does not use them with her class, they will be useful for some boy or

girl to look over when he has no lessons to learn. A satisfactory working set will include the United States Civil Service requirements for skilled mechanics and post-office employees, the state requirements for laborers and for office workers, the application blanks of an employment agency, a bonding company, an insurance company, a teachers' agency, a hospital training school for nurses, and a railway corporation. These will cover the general ground. Beyond them, the more, the better.

It is extraordinary with what unanimity all these various sorts of business men ask the same simple questions. The manager of a great corporation expects of his office boy, though on a smaller scale, just about the same qualities that his directors expect of him. What the bonding company demands of the cashier, the cashier demands of the cash girl. Without order, promptness, and honesty, nobody gets on anywhere in the business world.

It makes an interesting class exercise to run through sets of these blanks, and to see what are the general requirements of all occupations, and which are especially emphasized in particular fields. A synopsis of this information arranged as a wall chart is most impressive.

Take by way of illustration the great bonding and surety companies. They lay special emphasis on moral habits. "Have you ever heard," says the confidential sheet of the Massachusetts Bonding and Insurance Company, "that he [the applicant] has been suspected of: *a.* drunkenness, *b.* gambling, *c.* speculation, *d.* extravagance, *e.* dishonorable conduct, *f.* fraud or dishonesty?" Note the form of the question, "Have you ever heard that he has been suspected"—there must not be so much as the breath of suspicion of the sort of act which is represented in the child's world by copying school work, pitching pennies, or buying overmuch candy. Moreover, though

Pitching pennies is a form of gambling in the child's world which helps to fix moral habits

naturally it does not appear on the blank, the management of one company declares frankly that it will not become surety for a man who works in pool room, billiard room, or saloon, or who has been a drunkard within five years.

The United States Fidelity and Guaranty Company of Baltimore puts honesty first: "Was he ever suspected of fraud or dishonesty or any dishonorable act?" Next, it places personal habits: "Is he, or has he ever been, addicted to intemperance, gambling, immorality, or other vice?" Then follow questions concerning style of living, extravagant habits, character of friends and associates.

The American Surety Company wants to know whether the applicant is "sober, careful, and reliable; lives within his means; is free of even the suspicion of fraud or dishonesty, dishonorable or improper conduct, gambling, drinking, or speculation." With one voice, these great bonding companies, first, last, and all the time, want to know about the moral habits which are formed and fixed

during boyhood and girlhood, and in school. Under modern conditions, no person who cannot satisfy his bondsmen on these points can ever hope to rise to any position of trust.

Not only, however, is the one boy in two in the business world who, as we have seen, rises to a position of responsibility, likely at any time to need the services of a bonding company, he is likely in addition to require insurance. The insurance companies also make the same careful investigation into the young man's habits. As one manager put it, "When a young fellow is just starting out, the only thing we can lay stress on is his moral record. If this is good, we take the risk." Any boy, in short, who can look ahead at all can be brought to see these things without any moralizing over them. It is enough that the teacher point out the facts.

The employing companies go farther. They also ask concerning honesty, sobriety, industry, friends and associates, general character. Then, with singular unanimity, they all want to know what the applicant has been doing in school. The boy or girl may not "see the use," but next to habits and character, the business man pounces on school standing. Presumably, the business man knows his business.

"Profane, vulgar, and coarse language" is one of the things that interests the United States Civil Service Commission. It wants also to know whether the applicant has shown inefficiency in any occupation. One large mercantile house inquires whether the applicant can "work harmoniously with others." Several firms keep out of the way of persons who use tobacco. To a remarkable extent, the demand of the business world centers on matters which are entirely within a youth's own control.

After the documentary evidence comes the personal interview. All employers lay great weight on their first

general impressions. In fact, the employer's own business success turns partly on his power of sizing up other persons at first glance. Voice, manner, carriage, bearing, dress, language, all go to make up the favorable or unfavorable picture in the employer's mind — and competition for the best positions is close in these days.

But manners are habits, not put on for the moment, but drilled in by years of effort. Every slovenly vowel, every slatternly garment, may have to be paid for in hard cash. And the child can be made to see it.

The four cardinal habits of the business world are attention, honesty, cheerfulness, accuracy. Every successful worker has the first two. The third is a prime requisite of all salesmen and foremen; the fourth, of all bookkeepers and clerical workers. All of them can be acquired by every pupil of fair ability during a grammar-school and high-school course.

In brief, then, the business world says to the school pupil, "Know certain things, be certain things, and we pay you for the trouble." It is not the highest motive to appeal to; but it is one of the most efficient.

Always, however, is the life more than the meat. We want for the child a mind and body trained to the highest efficiency, guaranteeing the possessor the best chances of power and success. To this end we use the vocational motive because, among other advantages, it enables us to apply with especial efficiency the warning of the greatest of American psychologists:

"*Don't preach too much to your pupils or abound in good talk in the abstract.* Lie in wait rather for the practical opportunities, be prompt to seize these as they pass and thus at one operation get your pupils both to think, to feel, and to do. The strokes of behavior are what give new set to the character, and work the good habits into its organic tissue. *Preaching* and talking too soon become an ineffectual bore."

CHAPTER XVII

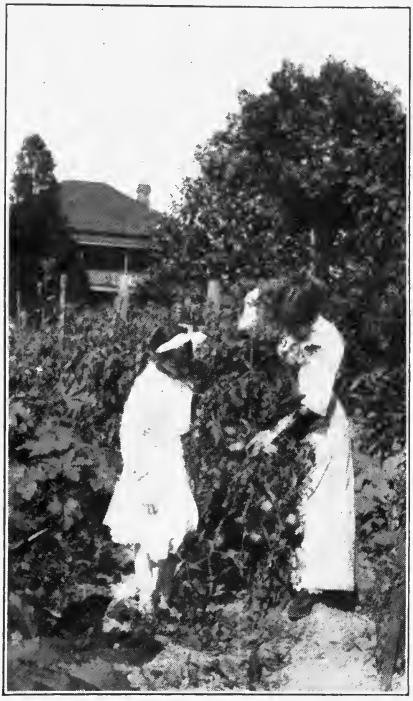
The Vocational Guide as a Constructive Social Force

VOCATIONAL guidance is, then, a fourfold process. Its results are: first, the arrival of the pupil at self-knowledge; second, the development in him of those habits and elements of character which make for a successful life; third, the opening of his eyes to the wide field of vocational opportunity that lies before him; fourth, the presenting to him the particular means through which he will be trained for his best efficiency. These are the four essentials of vocational guidance from the point of view of the particular youths who are under our control.

When, however, for the moment we turn away from the boy or girl who looks forward to becoming a worker to the work which, in our rich country, needs to be done, the problem of vocational guidance takes on certain wide social aspects.

We have here in the United States about one twentieth of the world's population. But we produce one quarter of the world's gold; a third or more of its silver, iron, steel, and coal; more than half its petroleum and copper; and seven tenths of its cotton. Much of this raw material we are now exporting for other countries to manufacture into finished products. But if we could educate our children to organize and man the mechanical industries which will turn these raw materials into finished products on our own soil, we should increase by just so much the total wealth of our country. If, in addition, we could secure this new wealth without at the same time increasing

correspondingly the number of persons among whom it is to be shared, the material well-being of the average citizen would, by so much, be augmented. Moreover, quite aside from the question of expanding industries, if those which we now have can be lifted to a higher level of efficiency, so much more abundant for us all will become the good things of life. To both aspects of this great task of adding to our national efficiency, the vocational guide may hope to contribute.



Courtesy of Extension Dept., Alabama Polytechnic Institute

The county agent who interests girls in gardening and canning adds to the general welfare of the community

The immediate problem is to get the workers into work that really counts for something. As things are now, the whole mass of persons engaged in getting things done divides itself into three groups.

There are, to begin with, the constructive workers. In this class belong all who are adding to the general welfare of the community. The man who cleans the street, or grows corn, or makes a chair, or teaches a child something that he needs to know, is

in this constructive class. Fortunately for the community, the vast majority of men and women belong in this group.

There is, however, another large social group which consists of those who do no particular harm to the body politic and no particular good, and of those whose good works just about balance their evil deeds. The state is no worse off for their presence, and no better. They are like the "cow boarders," whose milk just about pays their feed bills and the wages of their care takers. They cost their owner nothing—and he has the pleasure of their society.

To this group belong all sorts of well-meaning drones, all persons who are idle or nearly idle when they are able to work, all holders of ornamental offices, and all supernumerary workers who merely get in one another's way. When two grocers or two milkmen cover the same territory, the two together doing hardly more than either could do alone, only one of the two can be counted as a fully constructive worker; the other is more or less in the neutral class. When clerks in stores stand idle half the week in order that there may be enough of them to handle the rush of a single day or of particular hours, the customs of the community reduce all the excess clerks from the constructive group to the neutral. When wheat, bought in quantity at two cents the pound, is hauled to a factory and made over into fancy breakfast foods, put up in attractive packages, heavily advertised, and sold for ten cents the pound, but on the whole is rather less wholesome and nutritious for the process, nearly all this added labor is neutral in its results.

I happen to know a home in which there is a father who is an uncommonly efficient business man, a mother who is a fair home maker, and one young child. There

are also, in this household, three general servants and two laundresses, a nurse and a governess, a chef, a butler, two outside men, two stable men, and a general outside manager. The estate is about ten acres, and nothing in the way of food or clothing is produced on it. Possibly one fourth of these persons, including of course the man and his wife, are constructive workers. The rest merely hop up and down in their places, taking care of one another, but adding nothing to the world's well-being.

Now it is evident that the smaller the number of idlers or otherwise useless persons in any community, and the larger the number of constructive workers, the better it is for everybody concerned. The richer any man gets by honest methods in a productive industry, the richer does he make his neighbors; but the neutrals have to be fed by the rest; and the productive worker commonly has sufficient burden of his own to carry without being compelled to tote drones. When therefore the influence of a vocational guide swings any prospective worker from the neutral to the constructive class, the whole social group is benefited.

Still more is this the case with those workers who are not merely useless but actually destructive. For example, about one fifteenth of the national income goes for liquor, five times as much as for education. But the money spent on education is returned many fold to the community; that spent on liquor is not merely wasted; in addition it lowers by about one tenth the efficiency of those who consume it. The quarter million persons who follow the liquor business in the United States in all its ramifications are destructive workers. Each one of them swung over, even into the neutral group, would be a gain.

Other destructive workers are the manufacturers and

A destructive industry

sellers of patent medicines, unwholesome foods, the manifold substances that are used to adulterate other things, the purveyors of vicious amusements, the instigators of industrial troubles, commercial pirates, and the authors of foolish laws. All these and their like hinder the work of the wealth-producing group, and leave society poorer than if they had never lived at all.

If each teacher in the United States, each year, guided into constructive work one single boy or girl who would otherwise have followed some neutral or destructive occupation, that alone would probably wipe out the whole of both non-constructive groups. In addition, since this would add each year one constructive worker to the nation's ranks, who would thereupon continue to do useful work for ten, twenty, sometimes for forty years, this effort of the teacher would repay to the state ten, twenty, sometimes even forty times the amount of her

salary. If there is any constructive worker on whom the community may reckon its profit by the hundred fold, that worker is the efficient and conscientious teacher.

Hardly less in its far-reaching effects would be the benefit to the community if each teacher in the country should each year influence one pupil to fit himself for a higher grade of work than the pupil had selected, or for a work for which his special gifts more accurately fitted him. The well-placed boy or girl, sticking steadily to a thoroughly suitable job, may easily double the wage which he would have earned unguided. The estimate is moderate when we reflect that the wages of a competent engineer or manager are often a hundred times those of his least trained subordinates.

Right work, moreover, not only increases general efficiency and wages, but develops a corresponding moral

The home of a drinking man, showing the results of a destructive industry

life. If talents and work are in harmony, then the whole force of the daily work is on the long arm of the lever for wholesomeness of character. Where work and talents are ill-adjusted, then the daily work acts with a corresponding force in the opposite direction. This factor alone is sufficient to explain the success of one man and the failure of another man equally competent.

But promotion within the constructive group means a permanent elevation in the status of a family, better and longer training for the children who are to come, higher earning power for them, and more useful work done for the state, it may be for generations. Meanwhile, by so much has been relieved the congestion in the lower ranks of workers where the supply of labor is always in excess of the demand.

Furthermore, the promotion of the fit must mean to some extent the elimination of the unfit. One of the most serious disturbing factors in the industrial world today is the filling of high and responsible positions by men who do not earn their promotion but come to their places by some social pull of family or wealth. As a rule these men lack the practical common sense and the genuine democratic spirit which come only through experience with all kinds of men, hard work, and promotion on merit. This untrained man is often not simply a neutral but a destructive worker in a large sphere, for he lacks both the wisdom and the power demanded by his position of great responsibility. The wide difference in the *esprit de corps* of two large factories separated only by a street can often be traced to one of these untrained snobs. Many of our industrial troubles can be traced to this same source. An efficient system of vocational guidance, beginning in the grades and carried into the trade school, high school, store, and factory, will have a tendency not only to guide

Courtesy of Girls' Trade School, Boston

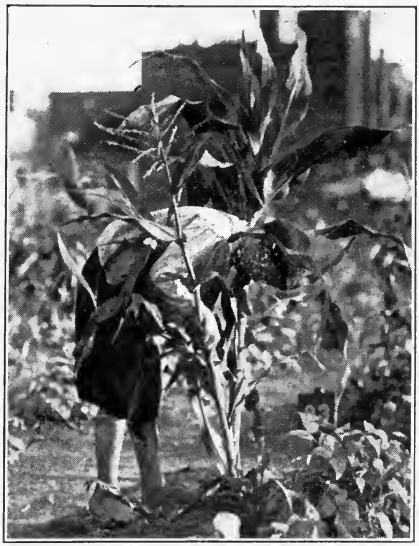
Classes in dressmaking. Vocational guidance directs the individual and tends to place responsibility in the hands of the competent

the individual but to establish customs which promote only the capable and competent to places of responsibility.

Another far-reaching result of vocational education will be a higher standard and a higher respect for our whole school system because it is suffused with a serious tone. Our secondary education, including the high schools and colleges, is now costing the taxpayers nearly twice as much as the elementary schools, which exist for all the children of all the people. For this large outlay the taxpayers have a right to demand good returns. There is no legitimate reason for spending the people's money on boys and girls who simply fritter their time away and lack any real purpose in life. As already observed, the youths with a life purpose use their time well in school; the others simply drift, have a good time, but acquire habits which are an injury rather than a benefit to them

in practical life. In such cases the people's money is worse than wasted.

Vocational guidance must mean a more varied and practical school system to meet the demands of real life. The present high-school system fails to hold more than a small per cent of the boys who enter. The school experience in industrial education in Massachusetts and other states proves beyond dispute that when a training is offered which promises equipment for a life work, more of the really serious minded pupils are attracted and can be held until they have received the training which the school offers. The more severe become the conditions of entrance and of continuance in our secondary schools, based on adaptation and preparation for a position, the better it will be for taxpayer, parents, and the youths.



School training which promises equipment for life work means a gain for taxpayers, parents, and youths

Especially wholesome will be the results on our higher institutions of learning of a genuine vocational spirit. Many of our oldest colleges and universities have become winter resorts for rich men's sons. The inevitable results are vicious and immoral products—men who expect the

world to give them a high living without a corresponding service. An efficient system of vocational guidance will tend to eliminate from society the unvocational college, and raise the standard so that no idler can remain, but is returned to his fond parents for their entertainment and edification.

This much then by way of suggestion concerning the economic and social effects of vocational control by the public schools. Still more important, though less obvious, should be its influence on the social conscience.

At the present time, in this country, we have developed a public opinion which worships the great consumer rather than the efficient producer. Public interest is in the people who have, rather than in those who earn. Even our education, with its stress on vague "culture," presupposes leisure more than toil. What we need is emphasis on the producer, that shall dignify home work, agriculture, the mechanic arts, and make every boy and girl feel how necessary and how worthy is the task to which he looks forward.

The time was when the man who made a pair of shoes made them well because he knew that he would meet the wearer of those shoes from fifty-two to three hundred and sixty-five times a year; and according as his work was good or bad the worker was proud or shamed. That time has gone forever, and the man who nails heels all day in a shop never knows what becomes of his product.

We need, therefore, a new type of practical ethical education that shall take the place of the old neighborly incentives, and hold the worker to his best work though its product travels across the continent. "Log rolling" was once used to mean good-will and coöperation where neighbors came together to help each other. As now used, the words have a very disreputable meaning, the

former hearty personal relations having disappeared. As Arthur Davis Dean has well said, "to teach a boy to saw, to plan furniture, to adjust machinery, is a simple task compared with that of training in him a social consciousness which shall make him feel his obligation to his employer and to the public." No man can be called educated who has not a willingness and a desire, as well as the trained ability, to do his part in the world's work. This virtue should be the natural result of good vocational guidance and training. Yet what is there like the outlook on a special task, and preparation for it, to lead any child into the larger, social, moral view of his life work!

The most important part of vocational guidance is therefore its contribution to culture and character. This must forever remain the first aim of education. We are beginning to realize that, in the words of Dr. Georg Kerschensteiner, "character is not to be gained by the reading of books or the hearing of sermons, but by continuous and steadily applied work. . . . We can educate no one who is not happy in his work. . . . In the training which inspires love of work and results in effectiveness of effort, precisely those civic virtues are developed which must be regarded as the foundation of all higher moral training — conscientiousness, diligence, perseverance, and devotion to a strenuous life."

THE APPENDIX

The following table from the Twelfth Census of the United States gives the per cent which the number of males and of females in specified occupations unemployed during any portion of the census year forms of the total number of the same sex so occupied.

Occupations	Per Cent of Males Unemployed in 1900	Per Cent of Males Unemployed in 1890	Per Cent of Females Unemployed in 1900	Per Cent of Females Unemployed in 1890
Glassworkers	59.9	53.1	45.5	39.1
Plasterers	56.1	42.9	....	....
Masons (brick and stone)	55.5	42.9	....	....
Teachers and professors in colleges, etc.	55.0	30.8	61.2	33.1
Brick and tile makers, etc.	48.4	43.6	....	....
Fishermen and oystermen	46.3	40.4	....	....
Paperhangers	44.5	28.0	....	....
Laborers (not specified)	44.3	33.4	44.1	22.6
Miners and quarrymen	44.3	47.9	....	....
Painters, glaziers, and varnishers	42.4	31.1	....	....
Carpenters and joiners	41.4	31.8	....	....
Hat and cap makers	41.0	33.1	34.9	33.3
Marble and stone cutters	39.5	30.3	....	....
Roofers and slaters	36.5	26.8	....	....
Agricultural laborers	36.1	17.2	44.3	18.6
Wood choppers	35.2	31.3	....	....
Saw and planing mill employees	35.1	31.7	....	....
Stove, furnace, and grate makers	34.7	30.4	....	....
Coopers	34.3	26.4	....	....
Boatmen and sailors	33.3	28.8	....	....
Potters	32.8	30.7	34.4	40.0
Other food preparers	32.7	23.3	....	....
Seamstresses	32.5	18.0	24.2	13.1
Boot and shoe makers and repairers	31.7	25.2	42.5	36.4
Rubber factory operatives	31.0	38.0	39.6	40.9
Lumbermen and raftsmen	30.9	29.5	....	....
Silk-mill operatives	29.3	27.4	25.8	24.3
Iron and steel workers	28.1	25.4	....	....
Actors, professional showmen, etc.	27.8	17.5	39.1	20.6
Tobacco and cigar factory operatives	27.2	21.5	31.1	27.2
Tailors and tailoresses	27.0	14.5	26.4	16.5
Turpentine farmers and laborers; other agricultural pursuits	26.4	16.0	....	....

Occupations	Per Cent of Males Unemployed in 1900	1890	Per Cent of Females Unemployed in 1900	1890
Charcoal, coke, and lime burners	26.2	26.4	....	....
Tin plate and tinware makers	25.9	14.5	....	....
Gold and silver workers	25.3	18.7	28.8	27.4
Wireworkers	25.3	17.0	....	....
Broom and brush makers	25.1	20.7	....	....
Carpet factory operatives	25.0	25.6	24.4	23.9
Leather curriers and tanners	24.8	20.3	....	....
Other woodworkers	24.6	16.9	....	....
Other metal workers	24.3	16.6	....	....
Other textile workers	23.8	19.6	22.1	15.0
Shirt, collar, and cuff makers	23.7	14.6	22.1	17.8
Oil well and oil works employees	22.8	13.2	....	....
Packers and shippers	22.5	18.0	26.0	21.2
Other miscellaneous industries	22.1	20.2	....	....
Plumbers and gas and steam fitters	22.0	13.4	....	....
Tool and cutlery makers	22.0	20.4	....	....
Trunk and leather-case makers, etc.	21.1	16.8	....	....
Cabinet makers	20.9	13.8	....	....
Upholsterers	20.9	15.0	21.3	14.9
Dressmakers	20.8	13.0	19.8	11.2
Butter and cheese makers	20.4	27.7	....	....
Hosiery and knitting mill operatives	20.3	31.5	20.0	29.9
Messengers and errand and office boys	19.7	12.2	21.0	13.5
Brassworkers	19.6	13.2	....	....
Woolen mill operatives	19.5	22.0	21.1	25.2
Bleachery and dye works operatives	19.3	15.9	....	....
Draymen, hackmen, teamsters, etc.	19.3	15.9	....	....
Boxmakers (paper)	18.8	14.9	20.4	17.1
Other textile mill operatives	18.7	20.7	18.6	18.7
Other chemical workers	18.5	19.5	....	....
Steam boiler makers	18.4	16.3	....	....
Engineers and firemen (not locomotive)	17.7	14.9	....	....
Mechanics (not otherwise specified)	17.6	14.4	....	....
Wheelwrights	17.4	12.8	....	....
Musicians and teachers of music	17.3	11.1	22.4	11.4
Glovemakers	17.1	38.8	20.0	32.8
Servants and waiters	17.0	9.8	14.8	7.0
Paper and pulp mill operatives	16.9	14.5	21.1	15.7
Distillers and rectifiers	16.4	15.5	....	....
Steam railroad employees	15.8	13.0	....	....
Telegraph and telephone linemen	15.8	10.5	....	....
Nurses and midwives	15.3	11.7	27.1	18.4
Stock raisers, herders, and drovers	15.3	11.6	....	....
Printers, lithographers, and pressmen	15.0	9.6	16.5	11.0

Occupations	Per Cent of Males Unemployed in 1900	1890	Per Cent of Females Unemployed in 1900	1890
Hostlers	14.7	10.6	....	....
Bookbinders	14.6	9.9	16.7	13.0
Hucksters and peddlers	14.6	10.5	14.3	6.4
Housekeepers and stewards	14.5	10.8	9.1	3.6
Other persons in trade and transportation	13.9	10.6	....	....
Blacksmiths	13.7	12.1	....	....
Machinists	13.4	10.8	....	....
Harness and saddle makers and repairers	13.3	10.0	....	....
Street railway employees	13.3	9.9	....	....
Cotton mill operatives	13.1	13.2	14.9	14.0
Engravers	13.0	9.7	....	....
Porters and helpers (in stores, etc.)	12.6	7.4	....	....
Bartenders	12.5	8.9	....	....
Gardeners, florists, nurserymen, etc.	12.3	13.3	8.7	7.4
Brewers and maltsters	12.1	8.6	....	....
Bottlers and soda water makers, etc.	11.9	9.0	....	....
Electricians, engineers (civil, etc.), and surveyors	11.8	9.9	....	....
Model and pattern makers	11.8	9.7	....	....
Millers	11.6	11.2	....	....
Butchers	11.5	7.6	....	....
Bakers	11.3	8.1	9.9	5.2
Clock and watch makers and repairers	11.3	9.9	11.9	11.4
Confectioners	11.2	7.6	16.6	8.5
Artists and teachers of art	10.7	7.0	17.6	7.4
Stenographers and typewriters	10.4	6.5	13.2	9.1
Janitors and sextons	10.1	7.8	7.8	5.0
Photographers	9.7	7.5	14.9	9.7
Telegraph and telephone operators	9.6	6.7	10.7	6.7
Watchmen, policemen, firemen, etc.; other domestic and personal service	8.9	6.8	....	....
Salesmen and saleswomen	8.4	5.6	11.0	6.4
Milliners	8.1	6.1	26.3	13.1
Dairymen and dairywomen	7.9	6.8	....	....
Launderers and laundresses	7.9	5.2	19.7	10.1
Barbers and hairdressers	7.7	5.6	12.2	6.7
Bookkeepers and accountants	7.7	5.0	8.8	6.4
Farmers, planters, and overseers	7.7	6.6	6.3	3.6
Literary and scientific persons	7.5	5.4	11.6	7.2
Agents	7.4	4.8	16.9	9.8
Clerks and copyists	7.3	5.0	9.6	5.8
Commercial travelers	7.2	5.4	....	....

Occupations	Per Cent of Males Unemployed in 1900	1890	Per Cent of Females Unemployed in 1900	1890
Architects, designers, draftsmen, etc.	6.8	4.5	....	....
Manufacturers and officials, etc.	6.8	6.1	8.1	2.4
Other professional service	5.8	5.5	....	....
Officials (government)	5.5	4.6	4.4	3.3
Foremen and overseers	4.7	5.4	....	....
Restaurant keepers	4.7	3.6	5.6	2.7
Boarding and lodging house keepers	4.4	3.2	2.7	0.8
Journalists	4.0	3.0	6.5	4.2
Clergymen	3.6	2.1	7.5	4.7
Merchants and dealers (wholesale)	3.4	3.6	....	....
Bankers and brokers	3.3	1.5	....	....
Dentists	3.3	2.4	....	....
Undertakers	3.2	2.8	....	....
Livery stable keepers	3.1	2.7	....	....
Merchants and dealers (except wholesale)	3.0	2.3	2.7	1.8
Hotel keepers	2.9	2.4	2.8	1.6
Lawyers	2.6	1.8	....	....
Saloon keepers	2.6	2.3	1.7	0.9
Soldiers, sailors, and marines (U. S.)	2.5	2.4	....	....
Officials of banks and companies	2.4	3.7	....	....
Physicians and surgeons	1.9	1.4	4.2	6.7

The following table, taken from Vol. II of the Twelfth Census of the United States, shows the total number of persons in the United States, ten years of age and over, engaged in each specified occupation. The classification is according to sex, and for the year 1900.

Occupations	Both Sexes Mainland	Males Mainland	Females Mainland
All occupations	29,074,117	23,754,205	5,319,912
Agricultural Pursuits	10,381,765	9,404,429	977,336
Agricultural laborers	4,410,877	3,747,663	663,209
Farm and plantation laborers	1,999,696	1,779,648	220,048
Farm laborers (members of family)	2,366,149	1,925,094	441,055
Garden and nursery laborers	45,032	42,926	2,106
Dairymen and dairywomen	10,875	9,983	892
Farmers, planters, and overseers	5,674,875	5,367,169	307,706
Farmers and planters	5,483,618	5,192,437	291,181
Farmers (members of family)	168,999	154,308	14,691
Farm and plantation overseers	17,067	15,484	1,583
Milk farmers	5,191	4,940	251
Gardeners, florists, nurserymen, etc.	61,788	58,928	2,860
Gardeners	36,577	35,378	1,199
Florists, nurserymen, and vine growers	16,836	15,700	1,136
Fruit growers	8,375	7,850	525
Lumbermen and raftsmen	72,020	71,920	100
Stock raisers, herders, and drovers	84,988	83,056	1,932
Stock raisers	37,629	36,548	1,081
Stock herders and drovers	47,359	46,508	851
Turpentine farmers and laborers	24,737	24,456	281
Wood choppers	36,075	35,962	113
Other agricultural pursuits	5,530	5,287	243
Apiarists	1,339	2,291	48
Not specified	4,911	3,996	195
Professional Service	1,258,739	828,163	430,576
Actors, professional showmen, etc.	34,760	27,903	6,857
Actors	14,708	8,334	6,374
Professional showmen	16,572	16,184	388
Theatrical managers, etc.	3,480	3,385	95
Architects, designers, draftsmen, etc	29,524	28,483	1,041
Architects	10,581	10,481	100
Designers, draftsmen, and inventors	18,943	18,002	941
Artists and teachers of art	24,873	13,852	11,021
Clergymen	111,638	108,265	3,373
Dentists	29,644	28,858	786
Electricians	50,717	50,308	409

Occupations	Both Sexes Mainland	Males Mainland	Females Mainland
Engineers (civil, etc.) and surveyors	43,239	43,155	84
Engineers (civil)	20,068	20,028	40
Engineers (mechanical and electrical)	14,334	14,304	30
Engineers (mining)	2,888	3,885	3
Surveyors	5,949	5,938	11
Journalists	30,038	27,845	2,193
Lawyers	114,460	113,450	1,010
Literary and scientific persons	19,066	13,082	5,984
Authors and scientists	6,039	3,425	2,614
Librarians and assistants	4,180	1,058	3,122
Chemists, assayers, and metallurgists	8,847	8,599	248
Musicians and teachers of music	92,174	39,815	52,359
Officials (government)	86,607	78,488	8,119
Officials (national government)[1]	37,020	30,591	6,429
Officials (state government)	4,345	4,070	275
Officials (county government)	22,697	21,974	723
Officials (city or town government)	22,545	21,853	692
Physicians and surgeons	132,002	124,615	7,387
Teachers and professors in colleges, etc.	446,133	118,519	327,614
Teachers	438,861	111,710	327,151
Professors in colleges and universities	7,272	6,809	463
Other professional service	13,864	11,525	2,339
Veterinary surgeons	8,163	8,149	14
Not specified	5,701	3,376	2,325
Domestic and Personal Service	5,580,657	3,485,208	2,095,449
Barbers and hairdressers	131,116	125,542	5,574
Bartenders	88,817	88,377	440
Boarding and lodging-house keepers	71,281	11,826	59,455
Hotel keepers	54,797	46,264	8,533
Housekeepers and stewards	155,153	8,224	146,929
Janitors and sextons	56,577	48,544	8,033
Janitors	51,191	43,249	7,942
Sextons	5,386	5,295	91
Laborers (not specified)	2,629,262	2,505,287	123,975
Elevator tenders	12,690	12,660	30
Laborers (coal yard)	9,361	9,349	12
Laborers (general)	2,577,951	2,454,053	123,898
Longshoremen	20,191	20,177	14
Stevedores	9,069	9,048	21
Launderers and laundresses	385,965	50,683	335,282
Laundry work (hand)	364,020	38,669	325,351
Laundry work (steam)	21,945	12,014	9,931

[1] Includes officers of United States Army and Navy.

Occupations	Both Sexes Mainland	Males Mainland	Females Mainland
Nurses and midwives	120,956	12,265	108,691
Nurses (trained)	11,804	758	11,046
Nurses (not specified)	103,523	11,507	92,016
Midwives	5,629	.....	5,629
Restaurant keepers	33,844	28,999	4,845
Saloon keepers	83,746	81,660	2,086
Servants and waiters	1,560,721	276,958	1,283,763
Servants	1,453,677	212,727	1,240,950
Waiters	107,044	64,231	42,813
Soldiers, sailors, and marines (U.S.)	43,235	43,235	.....
Soldiers (U. S.)	35,038	35,038	.....
Sailors (U. S.)	5,928	5,928	.....
Marines (U. S.)	2,269	2,269	.....
Watchmen, policemen, firemen, etc.	130,590	129,711	879
Watchmen, policemen, and detectives	116,056	115,177	879
Firemen (fire department)	14,534	14,534	.....
Other domestic and personal service	34,597	27,633	6,964
Hunters, trappers, guides, and scouts	3,048	2,999	49
Bootblacks	8,230	8,145	85
Not specified	23,319	16,489	6,830
Trade and Transportation	4,766,964	4,263,617	503,347
Agents	241,162	230,606	10,556
Agents (insurance and real estate)	119,208	117,067	2,141
Agents (not specified)	121,954	113,539	8,415
Bankers and brokers	73,277	72,984	293
Bankers and brokers (money and stocks)	65,943	65,695	248
Brokers (commercial)	7,334	7,289	45
Boatmen and sailors	78,406	78,253	153
Boatmen and canalmen	13,115	13,033	82
Pilots	4,896	4,891	5
Sailors	60,395	60,329	66
Bookkeepers and accountants	254,880	180,727	74,153
Clerks and copyists	630,127	544,881	85,246
Clerks and copyists	568,181	483,892	84,289
Clerks (shipping)	33,611	32,918	693
Letter and mail carriers	28,335	28,071	264
Commercial travelers	92,919	91,973	946
Draymen, hackmen, teamsters, etc.	538,933	538,029	904
Draymen, teamsters, and expressmen	502,359	501,498	861
Carriage and hack drivers	36,574	36,531	43
Foremen and overseers	55,450	54,032	1,418
Foremen and overseers (livery stable)	3,230	3,228	2

Occupations	Both Sexes Mainland	Males Mainland	Females Mainland
Foremen and overseers (steam railroad)	35,196	35,184	12
Foremen and overseers (street railway)	1,023	1,021	2
Foremen and overseers (not specified)	16,001	14,599	1,402
Hostlers	64,929	64,850	79
Hucksters and peddlers	76,649	73,734	2,915
Livery stable keepers	33,656	33,466	190
Merchants and dealers (except wholesale)	790,886	756,802	34,084
Drugs and medicines	57,271	56,094	1,177
Dry goods, fancy goods, and notions	45,820	41,467	4,353
Groceries	156,479	146,810	9,669
Liquors and wines	13,108	12,917	191
Boots and shoes	15,239	14,812	427
Cigars and tobacco	15,351	14,258	1,093
Clothing and men's furnishings	18,095	17,803	292
Coal and wood	20,860	20,600	260
General store	33,006	32,064	942
Lumber	16,772	16,690	82
Produce and provisions	34,175	33,506	669
Not specified	364,710	349,781	14,929
Merchants and dealers (wholesale)	42,293	42,032	261
Messengers and errand and office boys	71,622	64,959	6,663
Bundle and cash boys	10,497	6,105	4,392
Messengers	44,425	43,124	1,301
Office boys	16,700	15,730	970
Officials of banks and companies	74,072	72,801	1,271
Bank officials and cashiers	14,294	14,023	271
Officials (insurance and trust companies, etc.)	5,339	5,227	112
Officials (trade companies)	20,389	19,912	477
Officials (transportation companies)	34,050	33,639	411
Packers and shippers	59,545	39,557	19,988
Porters and helpers (in stores, etc.)	54,191	53,625	566
Salesmen and saleswomen	611,139	461,909	149,230
Steam railroad employees	582,150	580,462	1,688
Engineers and firemen	107,089	107,044	45
Baggagemen	19,085	19,075	10
Brakemen	67,474	67,443	31
Conductors	42,929	42,922	7
Laborers	249,377	248,429	948
Station agents and employees	45,963	45,342	621
Switchmen, yardmen, and flagmen	50,233	50,207	26

Occupations	Both Sexes Mainland	Males Mainland	Females Mainland
Stenographers and typewriters....	112,364	26,246	86,118
Stenographers.....	98,743	23,498	75,245
Typewriters.....	13,621	2,748	10,873
Street railway employees.....	68,919	68,873	46
Conductors.....	24,037	24,024	13
Drivers.....	1,352	1,352	.....
Laborers.....	4,644	4,632	12
Motormen.....	37,434	37,432	2
Station agents and employees...	1,452	1,433	19
Telegraph and telephone linemen...	14,757	14,757	.....
Telegraph and telephone operators	75,015	52,459	22,556
Telegraph operators.....	55,857	48,628	7,229
Telephone operators.....	19,158	3,831	15,327
Undertakers.....	16,189	15,866	323
Other persons in trade and transportation.....	53,434	49,734	3,700
Auctioneers.....	2,808	2,805	3
Decorators, drapers, and window dressers.....	3,052	2,756	296
Newspaper carriers and newsboys	6,893	6,824	69
Weighers, gaugers, and measurers	6,666	6,487	179
Not specified.....	34,015	30,862	3,153
Manufacturing and Mechanical Pursuits.....	7,085,992	5,722,788	1,313,204
Building Trades			
Carpenters and joiners.....	600,252	599,707	545
Carpenters and joiners.....	584,635	584,110	525
Ship carpenters.....	12,251	12,245	6
Apprentices and helpers.....	3,366	3,352	14
Masons (brick and stone).....	160,805	160,638	167
Masons.....	149,103	148,948	155
Masons' laborers.....	9,284	9,274	10
Apprentices and helpers.....	2,418	2,416	2
Painters, glaziers, and varnishers..	277,541	275,782	1,759
Painters, glaziers, and varnishers.	258,663	256,950	1,713
Painters (carriages and wagons)	17,347	17,313	34
Apprentices and helpers.....	1,531	1,519	12
Paper hangers.....	21,990	21,749	241
Paper hangers.....	21,794	21,558	236
Apprentices and helpers.....	196	191	5
Plasterers.....	35,694	35,649	45
Plasterers.....	35,334	35,290	44
Apprentices and helpers.....	360	359	1
Plumbers and gas and steam fitters	97,785	97,659	126
Plumbers and gas and steam fitters.....	92,216	92,093	123
Apprentices and helpers.....	5,569	5,566	3

Occupations	Both Sexes Mainland	Males Mainland	Females Mainland
Roofers and slaters	9,067	9,065	2
Roofers and slaters	8,931	8,929	2
Apprentices and helpers	136	136	.....
Mechanics (not otherwise specified)	9,392	9,351	41
Chemicals and Allied Products			
Oil well and oil works employees	24,626	24,573	53
Oil well employees	18,011	18,001	10
Oil works employees	6,615	6,572	43
Other chemical workers	14,814	12,035	2,779
Chemical works employees	6,740	5,687	1,053
Fertilizer makers	1,310	1,308	2
Powder and cartridge makers	4,136	2,745	1,391
Salt works employees	1,866	1,671	195
Starch makers	762	624	138
Clay, Glass, and Stone Products			
Brick and tile makers, etc	49,933	49,455	478
Brickmakers	45,594	45,467	127
Tile makers	3,017	2,667	350
Terra cotta workers	1,322	1,321	1
Glass workers	49,998	47,377	2,621
Marble and stone cutters	54,460	54,317	143
Potters	16,140	13,200	2,940
Fishing and Mining			
Fishermen and oystermen	68,177	67,715	462
Miners and quarrymen	563,866	562,501	1,365
Miners (coal)	344,289	343,665	624
Miners (gold and silver)	52,024	51,970	54
Miners (not otherwise specified)	132,969	132,345	624
Quarrymen	34,584	34,521	63
Food and Kindred Products			
Bakers	79,188	74,860	4,328
Butchers	113,956	113,578	378
Butter and cheese makers	19,241	18,593	648
Confectioners	31,194	21,980	9,214
Millers	40,548	40,362	186
Other food preparers	28,782	23,640	5,142
Fish curers and packers	952	824	128
Meat and fruit canners and preservers	9,249	5,983	3,266
Meat packers, curers, and picklers	13,776	12,799	977
Sugar markets and refiners	2,727	2,708	19
Not specified	2,078	1,326	752
Iron and Steel and their Products			
Blacksmiths	226,477	226,284	193

Occupations	Both Sexes Mainland	Males Mainland	Females Mainland
Blacksmiths	217,993	217,811	182
Apprentices and helpers	8,484	8,473	11
Iron and steel workers	290,611	287,241	3,370
Iron and steel workers	203,142	200,102	3,040
Molders	87,469	87,139	330
Machinists	283,145	282,574	571
Machinists	266,565	266,057	508
Apprentices and helpers	16,580	16,517	63
Steam boiler makers	33,046	33,038	8
Steam boiler makers	31,150	31,142	8
Helpers	1,896	1,896	.....
Stove, furnace, and grate makers	12,473	12,430	43
Tool and cutlery makers	28,122	27,376	746
Wheelwrights	13,505	13,495	10
Wire workers	18,487	16,701	1,786
Leather and its Finished Products			
Boot and shoe makers and repairers	208,912	169,393	39,519
Boot and shoe factory operatives	106,744	63,319	37,425
Shoemakers (not in shoe factory)	101,500	99,492	2,008
Apprentices	668	582	86
Harness and saddle makers and repairers	40,101	39,506	595
Leather curriers and tanners	42,671	40,917	1,754
Curriers	15,769	15,067	702
Tanners	26,839	25,793	1,046
Apprentices	63	57	6
Trunk and leather-case makers, etc.	7,051	5,472	1,579
Trunk makers	3,657	3,470	187
Leather-case and pocketbook makers	3,394	2,002	1,392
Liquors and Beverages			
Bottlers and soda water makers, etc.	10,519	9,725	794
Bottlers	9,716	8,940	776
Mineral and soda water makers	803	785	18
Brewers and maltsters	20,962	20,687	275
Distillers and rectifiers	3,144	3,114	30
Lumber and its Remanufacture			
Cabinet makers	35,619	35,552	67
Coopers	37,200	37,087	113
Saw and planing mill employees	161,624	161,251	373
Saw and planing mill employees	150,558	150,205	353
Lumber yard employees	11,066	11,046	20
Other woodworkers	111,273	104,468	6,805
Basket makers	6,522	4,460	2,062
Box makers (wood)	8,862	7,685	1,177
Piano and organ makers	6,220	6,021	199

Occupations	Both Sexes Mainland	Males Mainland	Females Mainland
Furniture manufactory employees	23,074	21,838	1,236
Not specified	66,595	64,464	2,131
Metals and Metal Products other than Iron and Steel			
Brass workers	26,760	25,870	890
Brass workers	20,653	19,806	847
Molders	5,990	5,947	43
Helpers	117	117	.....
Clock and watch makers and repairers	24,120	19,305	4,815
Clock factory operatives	3,480	2,618	862
Watch factory operatives	16,070	12,163	3,907
Clock and watch repairers	4,570	4,524	46
Gold and silver workers	26,112	19,732	6,380
Gold and silver workers	9,396	8,188	1,208
Jewelry manufactory employees	16,716	11,544	5,172
Tinplate and tinware makers	70,505	68,730	1,775
Tinplate makers	7,231	6,954	277
Tinners and tinware makers	62,093	60,606	1,487
Apprentices (tinsmiths)	1,181	1,170	11
Other metal workers	56,602	54,282	2,320
Copper workers	8,185	8,174	11
Electroplaters	6,387	6,146	241
Gunsmiths, locksmiths, and bell hangers	7,446	7,400	46
Lead and zinc workers	5,334	5,237	97
Molders (metal)	3,161	2,925	236
Not specified	26,089	24,400	1,689
Paper and Printing			
Bookbinders	30,278	14,646	15,632
Box makers (paper)	21,098	3,796	17,302
Engravers	11,151	10,698	453
Paper and pulp mill operatives	36,328	26,904	9,424
Printers, lithographers, and pressmen	155,147	139,166	15,981
Printers and pressmen	103,680	97,882	5,798
Lithographers	7,956	7,503	453
Compositors	36,838	27,222	9,616
Electrotypers and stereotypers	3,172	3,145	27
Apprentices (printers)	3,501	3,414	87
Textiles			
Bleachery and dye works operatives	22,278	20,493	1,785
Bleachery operatives	4,385	3,739	646
Dye works operatives	17,893	16,754	1,139
Carpet factory operatives	19,388	10,371	9,017

Occupations	Both Sexes Mainland	Males Mainland	Females Mainland
Cotton mill operatives	246,004	125,788	120,216
Hosiery and knitting mill operatives	47,120	12,630	34,490
Silk mill operatives	54,460	22,023	32,347
Woolen mill operatives	73,196	42,566	30,630
Other textile mill operatives	104,619	53,437	51,182
Print works operatives	6,056	4,963	1,093
Rope and cordage factory operatives	7,591	4,592	2,999
Hemp and jute mill operatives	3,519	1,577	1,942
Linen mill operatives	2,100	835	1,265
Worsted mill operatives	7,041	2,901	4,140
Textiles not specified	78,312	38,569	39,743
Dressmakers	346,884	2,090	344,794
Dressmakers	344,627	2,078	342,549
Apprentices	2,257	12	2,245
Hat and cap makers	22,733	15,110	7,623
Milliners	87,859	1,739	86,120
Milliners	85,851	1,718	84,133
Apprentices	2,008	21	1,987
Seamstresses	150,942	4,837	146,105
Shirt, collar and cuff makers	39,432	8,491	30,941
Tailors and tailoresses	229,649	160,714	68,935
Tailors and tailoresses	228,081	159,440	68,641
Apprentices	1,568	1,274	294
Other textile workers	29,967	8,925	21,042
Carpet (rag) makers	7,616	1,916	5,700
Lace and embroidery makers	9,275	2,007	7,268
Sail, awning, and tent makers	3,577	3,168	409
Sewing machine operators	5,772	736	5,036
Not specified	3,727	1,098	2,629
Miscellaneous Industries			
Broom and brush makers	10,220	8,643	1,577
Charcoal, coke, and lime burners	14,448	14,405	43
Engineers and firemen (not locomotives)	223,495	223,318	177
Glove makers	12,271	4,503	7,768
Manufacturers and officials, etc.	243,082	239,649	3,433
Manufacturers and officials, etc.	158,001	155,119	2,882
Builders and contractors	56,769	56,619	150
Publishers of books, maps, and newspapers	10,957	10,655	302
Officials of mining and quarrying companies	17,355	17,256	99
Model and pattern makers	15,073	14,869	204
Photographers	26,941	23,361	3,580
Rubber factory operatives	21,866	14,492	7,374
Tobacco and cigar factory operatives	131,452	87,955	43,497

Occupations	Both Sexes Mainland	Males Mainland	Females Mainland
Upholsterers	30,821	28,663	2,158
Other miscellaneous industries	471,300	380,490	90,810
Apprentices and helpers (not specified)	31,679	29,634	2,045
Artificial flower makers	2,775	437	2,338
Button makers	6,853	3,834	3,019
Candle, soap, and tallow makers	4,020	3,289	731
Corset makers	8,016	815	7,201
Cotton ginners	1,395	1,381	14
Electric light and power company employees	6,156	5,853	303
Gas works employees	6,955	6,940	15
Piano and organ tuners	4,293	4,249	44
Straw workers	3,838	911	2,927
Turpentine distillers	7,099	7,022	77
Umbrella and parasol makers	3,242	1,331	1,911
Well borers	6,608	6,597	11
Whitewashers	3,439	3,374	65
Not specified	374,932	304,823	70,109

For similar lists for your state and city (over 25,000), write to the Census Bureau, Washington, D. C.

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